1144

Phe Arg Asp Phe Leu Asn Arg Cys Leu Glu Met Asp Val Glu Lys Arg 195 200 205

Gly Ser Ala Lys Glu Leu Leu Gln His Gln Phe Leu Lys Ile Ala Lys 210 215 220

Pro Leu Ser Ser Leu Thr Pro Leu Ile Ala Ala Ala Lys Glu Ala Thr 225 230 235 240

Lys Asn Asn His

<210> 1136

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1136

Arg Ala Glu Phe Gly Thr Ser Pro Arg Ala Arg Arg His Glu Cys Cys 1 5 10 15

Arg Phe Leu Asp Asp Asn Gln Ile Ile Thr Ser Ser Gly Asp Thr Thr 20 25 30

Cys Ala Leu Trp Asp Ile Glu Thr Gly Gln Gln Thr Val Gly Phe Ala

Gly His Ser Gly Asp Val Met Ser Leu Ser Leu Ala Pro Asp Gly Arg 50 55 60

Thr Phe Val Ser Gly Ala Cys Asp Ala Ser Ile Lys Leu Trp Asp Val 65 70 75 80

Arg Asp Ser Met Cys Arg Gln Thr Phe Ile Gly His Glu Ser Asp Ile 85 90 95

Asn Ala Val Ala Phe Phe Pro Asn Gly Tyr Ala Phe Thr Thr Gly Ser 100 105 110

Asp Asp Ala Thr Cys Arg Leu Phe Asp Leu Arg Ala Asp Gln Glu Leu 115 120 125

Leu Met Tyr Ser His Asp Asn Ile Ile Cys Gly Ile Thr Ser Val Ala 130 135 140

Phe Ser Arg Ser Asp Gly Cys Cys Ser Leu Ala Thr Thr Thr Ser Thr 145 150 155 160

Ala Thr Ser Gly Met Pro 165

<210> 1137

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1137

Thr Asn Asn Lys Ser Leu Val Gln Leu Lys His Ile Ser Asn Asp Phe
1 5 10 15

Ser Lys Phe Lys Val Asp His Asp Arg Ile Ile Lys Asp Arg Lys Asp 20 25 30

Leu Ser Asn Leu Val Met Thr Ile Ile Ser Ile Phe Ala Glu Leu Lys 35 40 45

Ile Phe Asn Phe Ile Asn Met Leu Leu Gln Leu Pro Asp Leu Lys Lys 50 55 60

Lys Ser Phe Pro His Ser Gln Leu Lys Val Arg Thr Leu His Phe 65 70 75

<210> 1138

<211> 397

<212> PRT

<213> Homo sapiens

<400> 1138

Pro Thr Arg Pro Ser Ser Val Ser Arg Arg Asp Lys Ser Lys Gln Val
1 5 10 15

Trp Glu Ala Val Leu Leu Pro Leu Ser Leu Leu Ser Met Met Asp Leu 20 25 30

Arg Asn Thr Pro Ala Lys Ser Leu Asp Lys Phe Ile Glu Asp Tyr Leu $35 \hspace{1cm} 40 \hspace{1cm} 45$

Leu Pro Asp Thr Cys Phe Arg Met Gln Ile Asn His Ala Ile Asp Ile 50 55 60

Ile Cys Gly Phe Leu Lys Glu Arg Cys Phe Arg Gly Ser Ser Tyr Pro 65 70 75 80

Val Cys Val Ser Lys Val Lys Gly Gly Ser Ser Gly Lys Gly Thr
85 90 95

Thr	Leu	Arg	G1y 100	Arg	Ser	Asp	Ala	105	Leu	vai	vaı	Pne	110	ser	Pro
Leu	Thr	Thr 115	Phe	Gln	Asp	Gln	Leu 120	Asn	Arg	Arg	Gly	Glu 125	Phe	Ile	Glr
Glu	Ile 130	Arg	Arg	Gln	Leu	Glu 135	Ala	Cys	Gln	Arg	Glu 140	Arg	Ala	Phe	Ser
Val 145	Lys	Phe	Glu	Val	Gln 150	Ala	Pro	Arg	Trp	Gly 155	Asn	Pro	Arg	Ala	Leu 160
Ser	Phe	Val	Leu	Ser 165	Ser	Leu	Gln	Leu	Gly 170	Glu	Gly	Val	Glu	Phe 175	Asp
Val	Leu	Pro	Ala 180	Phe	Asp	Ala	Leu	Asp 185	Phe	Ala	Arg	Thr	Gly 190	Gln	Leu
Thr	Gly	Gly 195	Tyr	Lys	Pro	Asn	Pro 200	Gln	Ile	Tyr	Val	Lys 205	Leu	Ile	Glu
Glu	Cys 210	Thr	Asp	Leu	Gln	Lys 215	Glu	Gly	Glu	Phe	Ser 220	Thr	Cys	Phe	Thr
225		Gln		_	230					235					240
Leu	Ile	Arg	Leu	Val 245	Lys	His	Trp	Tyr	Gln 250	Asn	Cys	Lys	Lys	Lys 255	Leu
Gly	Lys	Leu	Pro 260	Pro	Gln	Tyr	Ala	Leu 265	Glu	Leu	Leu	Thr	Val 270	Tyr	Ala
_		Arg 275	_			_	280					285			
	290	Val				295			_		300				
Trp 305	Thr	Lys	Tyr	Tyr	Asp 310	Phe	Lys	Asn	Pro	Ile 315	Ile	Glu	Lys	Tyr	120
Arg	Arg	Gln	Leu	Thr 325	Lys	Pro	Arg	Pro	Val 330	Ile	Leu	Asp	Pro	Ala 335	Asp
		Gly	340			_		345					350		
Ala	Gln	Glu 355	Ala	Glu	Ala		Leu	Asn	Tyr	Pro	Суѕ	Phe	Lys	Asn	Trp

1147

Asp Gly Ser Pro Val Ser Ser Trp Ile Leu Leu Val Arg Pro Pro Ala 370 375 380

Ser Ser Leu Pro Phe Ile Pro Ala Pro Leu His Glu Ala 385 390 395

<210> 1139

<211> 180

<212> PRT

<213> Homo sapiens

<400> 1139

Phe Leu Leu Ser Asn Ala Arg Trp Ser Asn Arg Pro Asp Thr Ala Thr 1 5 10 15

Ala Leu Ala Gly Gly Ala Val Met Pro Glu Leu Ile Leu Ser Pro Ala 20 25 30

Thr Ala Pro His Pro Leu Lys Met Phe Ala Cys Ser Lys Phe Val Ser 35 40 45

Thr Pro Ser Leu Val Lys Ser Thr Ser Gln Leu Leu Ser Arg Pro Leu 50 55 60

Ser Ala Val Val Leu Lys Arg Pro Glu Ile Leu Thr Asp Glu Ser Leu 65 70 75 80

Ser Ser Leu Ala Val Ser Cys Pro Leu Thr Ser Leu Val Ser Ser Arg \$90\$

Ser Phe Gln Thr Ser Ala Ile Ser Arg Asp Ile Asp Thr Ala Ala Lys 100 105 110

Phe Ile Gly Ala Gly Ala Ala Thr Val Gly Val Ala Gly Ser Gly Ala 115 120 125

Gly Ile Gly Thr Val Phe Gly Ser Leu Ile Ile Gly Tyr Ala Arg Asn 130 135 140

Leu Ser Glu Ala Met Gly Leu Phe Cys Leu Met Val Ala Phe Leu Ile 165 170 175

Leu Phe Ala Met

<210> 1140 <211> 484 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (25) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1140 Trp Leu Leu Arg Ser Pro Gly Lys Leu Thr Ala Arg Glu Arg Ile Ser 10 Leu Leu Leu Asp Pro Gly Ser Phe Xaa Glu Ser Asp Met Phe Val Glu His Arq Cys Ala Asp Phe Gly Met Ala Ala Asp Lys Asn Lys Phe Pro 40 Gly Asp Ser Val Val Thr Gly Arg Gly Arg Ile Asn Gly Arg Leu Val 50 55 Tyr Val Phe Ser Gln Asp Phe Thr Val Phe Gly Gly Ser Leu Ser Gly 70 Ala His Ala Gln Lys Ile Cys Lys Ile Met Asp Gln Ala Ile Thr Val Gly Ala Pro Val Ile Gly Leu Asn Asp Ser Gly Gly Ala Arg Ile Gln 100 Glu Gly Val Glu Ser Leu Ala Gly Tyr Ala Asp Ile Phe Leu Arg Asn 115 120 Val Thr Ala Ser Gly Val Ile Pro Gln Ile Ser Leu Ile Met Gly Pro 135 Cys Ala Gly Gly Ala Val Tyr Ser Pro Ala Leu Thr Asp Phe Thr Phe 145 150 Met Val Lys Asp Thr Ser Tyr Leu Phe Ile Thr Gly Pro Asp Val Val 165 170 Lys Ser Val Thr Asn Glu Asp Val Thr Gln Glu Glu Leu Gly Gly Ala 185 Lys Thr His Thr Thr Met Ser Gly Val Ala His Arg Ala Phe Glu Asn 200 205 195

Asp	Val 210	Asp	Ala	Leu	Cys	Asn 215	Leu	Arg	Asp	Phe	Phe 220	Asn	Tyr	Leu	Pro
Leu 225	Ser	Ser	Gln	Asp	Pro 230	Ala	Pro	Val	Arg	Glu 235	Cys	His	Asp	Pro	Ser 240
Asp	Arg	Leu	Val	Pro 245	Glu	Leu	Asp	Thr	Ile 250	Val	Pro	Leu	Glu	Ser 255	Thr
Lys	Ala	Tyr	Asn 260	Met	Val	Asp	Ile	Ile 265	His	Ser	Val	Val	Asp 270	Glu	Arg
Glu	Phe	Phe 275	Glu	Ile	Met	Pro	Asn 280	Tyr	Ala	Lys	Asn	Ile 285	Ile	Val	Gly
Phe	Ala 290	Arg	Met	Asn	Gly	Arg 295	Thr	Val	Gly	Ile	Val 300	Gly	Asn	Gln	Pro
Lys 305	Val	Ala	Ser	Gly	Cys 310	Leu	Asp	Ile	Asn	Ser 315	Ser	Val	Lys	Gly	Ala 320
Arg	Phe	Val	Arg	Phe 325	Cys	Asp	Ala	Phe	Asn 330	Ile	Pro	Leu	Ile	Thr 335	Phe
Val	Asp	Val	Pro 340	Gly	Phe	Leu	Pro	Gly 345	Thr	Ala	Gln	Glu	Tyr 350	Gly	Gly
Ile	Ile	Arg 355	His	Gly	Ala	Lys	Leu 360	Leu	Tyr	Ala	Phe	Ala 365	Glu	Ala	Thr
Val	Pro 370	Lys	Val	Thr	Val	Ile 375	Thr	Arg	Lys	Ala	Tyr 380	Gly	Gly	Ala	Tyr
Asp 385	Val	Met	Ser	Ser	Lys 390	His	Leu	Cys	Gly	Asp 395	Thr	Asn	Tyr	Ala	Trp 400
Pro	Thr	Ala	Glu	Ile 405	Ala	Val	Met	Gly	Ala 410	Lys	Gly	Ala	Val	Glu 415	Ile
Ile	Phe	Lys	Gly 420	His	Glu	Asn	Val	Glu 425	Ala	Ala	Gln	Ala	Glu 430	Tyr	Ile
Glu	Lys	Phe 435	Ala	Asn	Pro	Phe	Pro 440	Ala	Ala	Val	Arg	Gly 445	Phe	Val	Asp
Asp	Ile 450	Ile	Gln	Pro	Ser	Ser 455	Thr	Arg	Ala	Arg	Ile 460	Cys	Cys	Asp	Leu
Asp 465	Val	Leu	Ala	Ser	Lys 470	Lys	Val	Gln	Arg	Pro 475	Trp	Arg	Lys	His	Ala 480

Asn Ile Pro Leu

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<210> 1141
<211> 59
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids
Leu Xaa Glu Leu Glu Arg Tyr Val Thr Ser Cys Leu Arg Lys Lys Arg
                                     10
                 5
Lys Pro Gln Ala Glu Lys Val Asp Val Ile Ala Gly Ser Ser Lys Met
Lys Gly Phe Ser Ser Ser Glu Ser Glu Ser Ser Ser Ser Ser Ser
         35
Ser Asp Ser Glu Xaa Xaa Glu Thr Gly Pro Ala
     50
                         55
<210> 1142
<211> 199
<212> PRT
<213> Homo sapiens
<400> 1142
Ser Gly Tyr Lys Thr Ile Ser Ala Met Gln Thr Ile Lys Cys Val Val
                  5
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Val Gly Asp Gly Ala Val Gly Lys Thr Cys Leu Leu Ile Ser Tyr Thr

1151

20 25 30 Thr Asn Lys Phe Pro Ser Glu Tyr Val Pro Thr Val Phe Asp Asn Tyr 35 40 Ala Val Thr Val Met Ile Gly Gly Glu Pro Tyr Thr Leu Gly Leu Phe Asp Thr Ala Gly Gln Glu Asp Tyr Asp Arg Leu Arg Pro Leu Ser Tyr 75 Pro Gln Thr Asp Val Phe Leu Val Cys Phe Ser Val Val Ser Pro Ser Ser Phe Glu Asn Val Lys Glu Lys Trp Val Pro Glu Ile Thr His His 105 Cys Pro Lys Thr Pro Phe Leu Leu Val Gly Thr Gln Ile Asp Leu Arg 115 120 Asp Asp Pro Ser Thr Ile Glu Lys Leu Ala Lys Asn Lys Gln Lys Pro 130 135 Ile Thr Pro Glu Thr Ala Glu Lys Leu Ala Arg Asp Leu Lys Ala Val 155 150 Lys Tyr Val Glu Cys Ser Ala Leu Thr Gln Lys Gly Leu Lys Asn Val 165 170 Phe Asp Glu Ala Ile Leu Ala Ala Leu Glu Pro Pro Glu Pro Lys Lys 190 180 185 Ser Arg Arg Cys Val Leu Leu 195 <210> 1143 <211> 171 <212> PRT <213> Homo sapiens <400> 1143 Gly Asp Leu Asp Cys Pro Asp Trp Val Leu Ala Glu Ile Ser Thr Leu Ala Lys Met Tyr Glu Lys Ile Leu Lys Leu Thr Ala Asp Ala Lys Phe

25

35

Glu Ser Gly Asp Val Lys Ala Thr Val Ala Val Leu Ser Phe Ile Leu

1152

Ser Ser Ala Ala Lys His Ser Val Asp Gly Glu Ser Leu Ser Ser Glu Leu Gln Gln Leu Gly Leu Pro Lys Glu His Ala Ala Ser Leu Cys Arg 65 70 Cys Tyr Glu Glu Lys Gln Ser Pro Leu Gln Lys His Leu Arg Val Cys 90 Ser Leu Arg Met Asn Arg Leu Ala Gly Val Gly Trp Arg Val Asp Tyr 105 Thr Leu Ser Ser Leu Leu Gln Ser Val Glu Pro Met Val His 115 120 Leu Arg Leu Glu Val Ala Ala Pro Gly Thr Pro Ala Gln Pro Val 135 Ala Met Ser Leu Ser Ala Asp Lys Phe Gln Val Leu Leu Ala Glu Leu 150 155 Lys Gln Ala Gln Thr Leu Met Ser Ser Leu Gly 165 <210> 1144 <211> 151 <212> PRT <213> Homo sapiens

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<211> 151
<212> PRT
<213> Homo sapiens

<220>
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<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
<221> SITE
<222> (40)
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1144
Gln Trp Arg Gln Gly Val Gln Gly Arg Ser Ala Ser Gly Thr Ser Thr
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1153

Cys Arg Val Ala Arg Xaa Gly Gln Asp Trp Pro Ala Ala Ser Pro Gly 20 25 30

Val Asn Leu Arg Asn Xaa Phe Xaa Pro Pro Leu Leu Leu Ala Pro Val 35 40 45

Pro Thr Pro Val Ala Pro Ser Leu Gly Ser Pro Leu Leu Ser His
50 55 60

Pro Glu Arg Gln Ser Gly Pro Val Thr Gly Gly Ala Gly Glu Gly His 65 70 75 80

Arg Cys Ala Ser Pro Gln Thr Val Cys Gln Val Ser Glu Leu Val Thr 85 90 95

Arg Pro Ala Ala Gl
n Pro Ser Ala Ala Gl
n Pro Ala Ala Pro Ala 100 105 110

Gly Gly Arg Thr Pro Gly Arg Ala Gly Pro His Leu Pro Ile Tyr Lys 115 120 125

Ile Gly Gln Gly Asn Met Lys Ala Asp Leu Gln Ala Ala Ala Thr Ala 130 135 140

Lys Pro Gly Lys Ser Gln Gln 145 150

<210> 1145

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1145

Ala Asp Ile Ala Gly Val Leu Ala Ile Arg Pro Asp Glu Leu Arg Phe 1 5 10 15

Arg Tyr Ser Met Val Ala Tyr Trp Arg Gln Ala Gly Leu Ser Tyr Ile 20 25 30

Arg Tyr Ser Gln Ile Cys Ala Lys Ala Val Arg Asp Ala Leu Lys Thr 35 40 45

Glu Phe Lys Ala Asn Ala Glu Lys Thr Ser Gly Ser Asn Val Lys Ile 50 55 60

Val Lys Val Lys Lys Glu

<210> 1146 <211> 166 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (56) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1146 Leu His Ala Asn Gln Val Ile His Arg Asp Ile Lys Ser Asp Asn Val Leu Leu Gly Met Glu Gly Ser Val Lys Leu Thr Asp Phe Gly Phe Cys 25 20 Ala Gln Ile Thr Pro Glu Gln Ser Lys Arg Ser Thr Met Val Gly Thr 40 Pro Tyr Trp Met Ala Pro Glu Xaa Val Thr Arg Lys Ala Tyr Gly Pro Lys Val Asp Ile Trp Ser Leu Gly Ile Met Ala Ile Glu Met Val Glu 65 70 Gly Glu Pro Pro Tyr Leu Asn Glu Asn Pro Leu Arg Ala Leu Tyr Leu 85 90 Ile Ala Thr Asn Gly Thr Pro Glu Leu Gln Asn Pro Glu Lys Leu Ser 105 Pro Ile Phe Arg Asp Phe Leu Asn Arg Cys Leu Glu Met Asp Val Glu 115 120 Lys Arg Gly Ser Ala Lys Glu Leu Leu Gln His Pro Phe Leu Lys Leu 135 Ala Lys Pro Leu Ser Ser Leu Thr Pro Leu Ile Met Ala Ala Lys Glu 150 155

<210> 1147

<211> 420

<212> PRT

<213> Homo sapiens

Ala Met Lys Ser Asn Arg

WO 00/55350

<220>

<22	l> s:	TE													
	2> (2														_
<223	3> Xa	aa ed	quals	s any	y of	the	natı	ırall	Ly o	ccuri	ring	L-ar	nino	acio	is
<400)> 11	L47													
Cys 1	Pro	Pro	Phe	Ser 5	Val	Arg	Val	Pro	Pro 10	Trp	Ala	Gly	Leu	Ala 15	Le
Leu	Pro	Ser	Pro 20	Ser	Leu	Met	Ala	Leu 25	Leu	Arg	Arg	Pro	Thr 30	Val	Sei
Ser	Asp	Leu 35	Glu	Asn	Ile	Asp	Thr 40	Gly	Val	Asn	Ser	Lys 45	Val	Lys	Sei
His	Val 50	Thr	Ile	Arg	Arg	Thr 55	Val	Leu	Glu	Glu	Ile 60	Gly	Asn	Arg	Va:
Thr 65	Thr	Arg	Ala	Ala	Gln 70	Val	Ala	Lys	Lys	Ala 75	Gln	Asn	Thr	Lys	Va:
Pro	Val	Gln	Pro	Thr 85	Lys	Thr	Thr	Asn	Val 90	Asn	Lys	Gln	Leu	Lys 95	Pro
Thr	Ala	Ser	Val 100	Lys	Pro	Val	Gln	Met 105	Glu	Lys	Leu	Ala	Pro 110	Lys	Gly
Pro	Ser	Pro 115	Thr	Pro	Glu	Asp	Val 120	Ser	Met	Lys	Glu	Glu 125	Asn	Leu	Суя
Gln	Ala 130	Phe	ser	Asp	Ala	Leu 135	Leu	Cys	Lys	Ile	Glu 140	Asp	Ile	Asp	Ası
Glu 145	Asp	Trp	Glu	Asn	Pro 150	Gln	Leu	Cys	Ser	Asp 155	туг	Val	Lys	Asp	116
Tyr	Gln	Tyr	Leu	Arg 165	Gln	Leu	Glu	Val	Leu 170	Gln	Ser	Ile	Asn	Pro 175	His
Phe	Leu	Asp	Gly 180	Arg	Asp	Ile	Asn	Gly 185	Arg	Met	Arg	Ala	Ile 190	Leu	۷a:
Asp	Trp	Leu 195	Val	Gln	Val	His	Ser 200	Lys	Phe	Xaa	Leu	Leu 205	Gln	Glu	Th
Leu	Туг 210	Met	Cys	Val	Gly	Ile 215	Met	Asp	Arg	Phe	Leu 220	Gln	Val	Gln	Pro
Val 225	Ser	Arg	Lys	Lys	Leu 230	Gln	Leu	Val	Gly	Ile 235	Thr	Ala	Leu	Leu	Let 240

1156

Ala Ser Lys Tyr Glu Glu Met Phe Ser Pro Asn Ile Glu Asp Phe Val 245 250 255

Tyr Ile Thr Asp Asn Ala Tyr Thr Ser Ser Gln Ile Arg Glu Met Glu 260 265 270

Thr Leu Ile Leu Lys Glu Leu Lys Phe Glu Leu Gly Arg Pro Leu Pro 275 280 285

Leu His Phe Leu Arg Arg Ala Ser Lys Ala Gly Glu Val Asp Val Glu 290 295 300

Gln His Thr Leu Ala Lys Tyr Leu Met Glu Leu Thr Leu Ile Asp Tyr 305 310 315 320

Asp Met Val His Tyr His Pro Ser Lys Val Ala Ala Ala Ala Ser Cys 325 330 335

Leu Ser Gln Lys Val Leu Gly Gln Gly Lys Trp Asn Leu Lys Gln Gln 340 345 350

Tyr Tyr Thr Gly Tyr Thr Glu Asn Glu Val Leu Glu Val Met Gln His 355 360 365

Met Ala Lys Asn Val Val Lys Val Asn Glu Asn Leu Thr Lys Phe Ile 370 375 380

Ala Ile Lys Asn Lys Tyr Ala Ser Ser Lys Leu Leu Lys Ile Ser Met 385 390 395 400

Ile Pro Gln Leu Asn Ser Lys Ala Val Lys Asp Leu Ala Ser Pro Leu 405 410 415

Ile Gly Arg Ser 420

<210> 1148

<211> 249

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (244)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1148

Gln Ser Asn Ala Val Trp Leu Leu Gly His Leu His Leu Ser Thr Leu

1157

1				5					10					15	
Ser	Ser	Ser	Gln 20	Ser	Arg	Ala	Ser	Val 25	Pro	Thr	Asp	Tyr	Ser 30	Tyr	Leu
Pro	Glu	Ser 35	Ser	Phe	Ile	Gly	Ala 40	Ala	Ile	Gly	Phe	Phe 45	Ile	Thr	Gly
Gly	Lys 50	Lys	Gly	Pro	Glu	Ser 55	Val	Pro	Pro	Ser	Leu 60	Leu	Lys	Val	Val
Met 65	Lys	Pro	Ile	Ala	Thr 70	Val	Gly	Glu	Ser	Tyr 75	Gln	Tyr	Pro	Pro	Val 80
Asn	Trp	Ala	Ala	Leu 85	Leu	Ser	Pro	Leu	Met 90	Arg	Leu	Asn	Phe	Gly 95	Glu
Glu	Ile	Gln	Gln 100	Leu	Cys	Leu	Glu	Ile 105	Met	Val	Thr	Gln	Ala 110	Gln	Ser
Ser	Gln	Asn 115	Ala	Ala	Ala	Leu	Leu 120	Gly	Leu	Trp	Val	Thr 125	Pro	Pro	Leu
Ile	His 130	Ser	Leu	Ser	Leu	Asn 135	Thr	Lys	Arg	Tyr	Leu 140	Leu	Ile	Ser	Ala
Pro 145	Leu	Trp	Ile	Lys	His 150	Ile	Ser	Asp	Glu	Gln 155	Ile	Leu	Gly	Phe	Val 160
Glu	Asn	Leu	Met	Val 165	Ala	Val	Phe	Lys	Ala 170	Ala	Ser	Pro	Leu	Gly 175	Ser
Pro	Glu	Leu	Cys 180	Pro	Ser	Ala	Leu	His 185	Gly	Leu	Ser	Gln	Ala 190	Met	Lys
Leu	Pro	Ser 195	Pro	Ala	His	His	Leu 200	Trp	Ser	Leu	Leu	Ser 205	Glu	Ala	Thr
Gly	Lys 210	Ile	Phe	Asp	Leu	Leu 215	Pro	Asn	Lys	Ile	Arg 220	Arg	Lys	Asp	Leu
Glu 225	Leu	Tyr	Ile	Ser	Ile 230	Ala	Lys	Cys	Leu	Leu 235	Glu	Met	Thr	Asp	Asp 240
Asp	Ala	Asn	Xaa	Asp 245	Arg	Pro	Gly	Tyr							

<210> 1149 <211> 239

1158

<212> PRT <213> Homo sapiens

<400> 1149

Arg Asp Pro Pro Arg Pro Val Gln Ser Gly Leu Gly Ala Ala Gly Thr
1 5 10 15

Leu Ser Trp Leu Pro Pro Pro Glu Gln Pro Val Leu Val Pro Arg Leu
20 25 30

Pro Ala Pro Arg Pro Val Met Thr Leu Arg Pro Ser Leu Leu Pro Leu 35 40 45

His Leu Leu Leu Leu Leu Leu Ser Ala Ala Val Cys Arg Ala Glu 50 55 60

Ala Gly Leu Glu Thr Glu Ser Pro Val Arg Thr Leu Gln Val Glu Thr
65 70 75 80

Leu Val Glu Pro Pro Glu Pro Cys Ala Glu Pro Ala Ala Phe Gly Asp 85 90 95

Thr Leu His Ile His Tyr Thr Gly Ser Leu Val Asp Gly Arg Ile Ile 100 105 110

Asp Thr Ser Leu Thr Arg Asp Pro Leu Val Ile Glu Leu Gly Gln Lys 115 120 125

Gln Val Ile Pro Gly Leu Glu Gln Ser Leu Leu Asp Met Cys Val Gly 130 135 140

Glu Lys Arg Arg Ala Ile Ile Pro Ser His Leu Ala Tyr Gly Lys Arg 145 150 155 160

Gly Phe Pro Pro Ser Val Pro Ala Asp Ala Val Val Gln Tyr Asp Val 165 170 175

Glu Leu Ile Ala Leu Ile Arg Ala Asn Tyr Trp Leu Lys Leu Val Lys 180 185 190

Gly Ile Leu Pro Leu Val Gly Met Ala Met Val Pro Ala Leu Leu Gly
195 200 205

Leu Ile Gly Tyr His Leu Tyr Arg Lys Ala Asn Arg Pro Lys Val Ser 210 215 220

Lys Lys Lys Leu Lys Glu Glu Lys Arg Asn Lys Ser Lys Lys Lys 225 230 235

<210> 1150 <211> 394 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1150 Ala Glu Xaa Gly Lys Thr Glu Trp Leu Phe Gly Met Asp Glu Gly Arg Lys Gln Leu Ala Ala Ser Ala Gly Phe Arg Arg Leu Ile Thr Val Ala 25 Leu His Arg Gly Gln Gln Tyr Glu Ser Met Asp His Ile Gln Ala Glu 40 Leu Ser Ala Arg Val Met Glu Leu Ala Pro Ala Gly Met Pro Thr Gln 55 Gln Gln Val Pro Phe Leu Ser Val Gly Gly Asp Ile Gly Val Arg Thr Val Gln His Gln Asp Cys Ser Pro Leu Ser Gly Asp Tyr Val Ile Glu 85 90 Asp Val Gln Gly Asp Asp Lys Arg Tyr Phe Arg Arg Leu Ile Phe Leu 100 105 Ser Asn Arg Asn Val Val Gln Ser Glu Ala Arg Leu Leu Lys Asp Val 120 Ser His Lys Ala Gln Lys Lys Arg Lys Lys Asp Arg Lys Lys Gln Arg 135 140 Pro Ala Asp Ala Glu Asp Leu Pro Ala Ala Pro Gly Gln Ser Ile Asp 150 155 145 Lys Ser Tyr Leu Cys Cys Glu His His Lys Ala Met Ile Ala Gly Leu 170 Ala Leu Leu Arg Asn Pro Glu Leu Leu Glu Ile Pro Leu Ala Leu 185 190 Leu Val Val Gly Leu Gly Gly Gly Ser Leu Pro Leu Phe Val His Asp 195 200

His Phe Pro Lys Ser Cys Ile Asp Ala Val Glu Ile Asp Pro Ser Met

1160

215 220 210 Leu Glu Val Ala Thr Gln Trp Phe Gly Phe Ser Gln Ser Asp Arg Met 230 235 225 Lys Val His Ile Ala Asp Gly Leu Asp Tyr Ile Ala Ser Leu Ala Gly 250 Gly Glu Ala Arg Pro Cys Tyr Asp Val Ile Met Phe Asp Val Asp 265 Ser Lys Asp Pro Thr Leu Gly Met Ser Cys Pro Pro Pro Ala Phe Val 280 275 Glu Gln Ser Phe Leu Gln Lys Val Lys Ser Ile Leu Thr Pro Glu Gly 295 Val Phe Ile Leu Asn Leu Val Cys Arg Asp Leu Gly Leu Lys Asp Ser 315 310 Val Leu Ala Gly Leu Lys Ala Val Phe Pro Leu Leu Tyr Val Arg Arg 325 330 Ile Glu Gly Glu Val Asn Glu Ile Leu Phe Cys Gln Leu His Pro Glu 345 Gln Lys Leu Ala Thr Pro Glu Leu Leu Glu Thr Ala Gln Ala Leu Glu 355 360 Arg Thr Leu Arg Lys Pro Gly Arg Gly Trp Asp Asp Thr Tyr Val Leu 380 370 375 Ser Asp Met Leu Lys Thr Val Lys Ile Val 390

<210> 1151 <211> 111

<212> PRT

<213> Homo sapiens

<400> 1151

Val Asn Val Asn Asn Pro Ser Leu Cys His Ser Ser His Leu Val Asp 1 5 10 15

Leu Gly Ser Gly Ser Val Glu Phe Cys Ala Trp Glu Trp Ser Trp Arg 20 25 30

Glu Trp Gly Leu Cys Thr Ala Ala Thr Ser Pro Arg Ser Ser His Leu 35 40 45

1161

Pro Ala Pro Arg Pro Gly Cys Met Ala Ala Pro Val Cys Val Gln Arg 50 55 60

Ser Val Ser His Pro Leu His Leu Leu Ser Gly Gly Leu Gly Ser Pro 65 70 75 80

Thr Cys Cys Gln Asp Leu Gly Ala Ile Lys Tyr Ser Gly Phe Val Lys 85 90 95

<210> 1152

<211> 172

<212> PRT

<213> Homo sapiens

<400> 1152

Leu Gly Asp Thr Ile Glu Gly Arg Leu Gln Val Pro Val Arg Asn Ser 1 5 10 15

Arg Val Asp Pro Arg Val Arg Ala Arg Gly Ala Asp Arg Met Gly Lys
20 25 30

Cys Arg Gly Leu Arg Thr Ala Arg Lys Leu Arg Ser His Arg Arg Asp
35 40 45

Gln Lys Trp His Asp Lys Gln Tyr Lys Lys Ala His Leu Gly Thr Ala 50 55 60

Leu Lys Ala Asn Pro Phe Gly Gly Ala Ser His Ala Lys Gly Ile Val 65 70 75 80

Leu Glu Lys Val Gly Val Glu Ala Lys Gln Pro Asn Ser Ala Ile Arg 85 90 95

Lys Cys Val Arg Val Gln Leu Ile Lys Asn Gly Lys Lys Ile Thr Ala 100 105 110

Phe Val Pro Asn Asp Gly Cys Leu Asn Phe Ile Glu Glu Asn Asp Glu 115 120 125

Val Leu Val Ala Gly Phe Gly Arg Lys Gly His Ala Val Gly Asp Ile 130 135 140

Pro Gly Val Arg Phe Lys Val Val Lys Val Ala Asn Val Ser Leu Leu 145 150 155 160

1162

Ala Leu Tyr Lys Gly Lys Lys Glu Arg Pro Arg Ser 165 170

<210> 1153

<211> 197

<212> PRT

<213> Homo sapiens

<400> 1153

Tyr Trp Cys Glu Gln Cys Asp Val Gln Phe Ser Ser Ser Glu Leu 1 5 10 15

Tyr Leu His Phe Gln Glu His Ser Cys Asp Glu Gln Tyr Leu Cys Gln 20 25 30

Phe Cys Glu His Glu Thr Asn Asp Pro Glu Asp Leu His Ser His Val
35 40 45

Val Asn Glu His Ala Cys Lys Leu Ile Glu Leu Ser Asp Lys Tyr Asn 50 55 60

Asn Gly Glu His Gly Gln Tyr Ser Leu Leu Ser Lys Ile Thr Phe Asp 65 70 75 80

Lys Cys Lys Asn Phe Phe Val Cys Gln Val Cys Gly Phe Arg Ser Arg

Leu His Thr Asn Val Asn Arg His Val Ala Ile Glu His Thr Lys Ile 100 105 110

Phe Pro His Val Cys Asp Asp Cys Gly Lys Gly Phe Ser Ser Met Leu 115 120 125

Glu Tyr Cys Lys His Leu Asn Ser His Leu Ser Glu Gly Ile Tyr Leu 130 135 140

Cys Gln Tyr Cys Glu Tyr Ser Thr Gly Gln Ile Glu Asp Leu Lys Ile 145 150 155 160

His Leu Asp Phe Lys His Ser Ala Asp Leu Pro His Lys Cys Ser Asp 165 170 175

Cys Leu Met Arg Phe Gly Asn Glu Arg Glu Leu Ile Ser His Leu Pro 180 185 190

Val His Glu Thr Thr

1163

<210> 1154 <211> 156 <212> PRT <213> Homo sapiens <400> 1154 Pro Ala Lys Glu Arg Arg Ser Ser Ser Ser Ser Ser Ser Ser Ser 10 25 Ser Ser Ser Ser Ser Glu Gly Ser Ser Leu Pro Val Gln Pro Glu 40 Val Ala Leu Lys Arg Val Pro Ser Pro Thr Pro Ala Pro Lys Glu Ala 55 Val Arg Glu Gly Arg Pro Pro Glu Pro Thr Pro Ala Lys Arg Lys Arg 70 75 90 85 100 105 Ser Ser Ser Ser Ser Ser Ser Ser Ser Pro Ser Pro Ala Lys 120 Pro Gly Pro Gln Ala Cys Pro Asn Leu Gln Ala Pro Arg Ser His Pro 135 130 Leu Ala Ser Gly Gly Pro Ala Ala Pro Gly Ser Gln 145 150 155 <210> 1155

<220>

<221> SITE

<222> (73)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<211> 125

<212> PRT

<213> Homo sapiens

1164

<222> (105) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (122) <223> Xaa equals any of the naturally occurring L-amino acids Pro Glu Ala Pro Arg Gly Val Val Thr Cys Leu Arg Ala Leu Leu Ser 10 His Gln His Gln Thr Arg Pro His Arg Val Pro Gly Thr Met Phe Gly Lys Arg Lys Lys Arg Val Glu Ile Ser Ala Pro Ser Asn Phe Glu His 35 40 Arg Val His Thr Gly Phe Asp Gln His Glu Gln Lys Phe Thr Gly Leu 55 Pro Arg Gln Trp Gln Ser Leu Ile Xaa Glu Ser Ala Arg Arg Pro Lys 75 70 Pro Leu Val Asp Pro Ala Cys Ile Thr Ser Ile Gln Pro Gly Ala Pro 85 90 Lys Thr Ile Val Arg Gly Ser Lys Xaa Ala Lys Asp Gly Ala Leu Thr 100 Leu Leu Leu Asp Glu Phe Glu Asn Met Xaa Val Thr Arg 120 115 <210> 1156 <211> 202 <212> PRT <213> Homo sapiens <400> 1156 Arg Pro Thr Arg Pro Gln Pro Ser Pro Asp Glu Ala Arg Pro Leu Gln Ala Leu Leu Asp Gly Arg Gly Leu Cys Val Asn Ala Ser Ala Val Ser 25

Arg Leu Arg Ala Tyr Leu Leu Pro Ala Pro Pro Ala Pro Gly Asn Ala

Ser Glu Ser Glu Glu Asp Arg Ser Ala Gly Ser Val Glu Ser Pro Ser

1165

50 55 60 Val Ser Ser Thr His Arg Val Ser Asp Pro Lys Phe His Pro Leu His 70 Ser Lys Ile Ile Ile Lys Lys Gly His Ala Lys Asp Ser Gln Arg Tyr Lys Val Asp Tyr Glu Ser Gln Ser Thr Asp Thr Gln Asn Phe Ser 105 Ser Glu Ser Lys Arg Glu Thr Glu Tyr Gly Pro Cys Arg Arg Glu Met 115 120 Glu Asp Thr Leu Asn His Leu Lys Phe Leu Asn Val Leu Ser Pro Arg 135 Gly Val His Ile Pro Asn Cys Asp Lys Lys Gly Phe Tyr Lys Lys 150 155 Gln Cys Arg Pro Ser Lys Gly Arg Lys Arg Gly Phe Cys Trp Cys Val 165 Asp Lys Tyr Gly Gln Pro Leu Pro Gly Tyr Thr Thr Lys Gly Lys Glu 180 185 190 Asp Val His Cys Tyr Ser Met Gln Ser Lys 200 195 <210> 1157 <211> 269 <212> PRT <213> Homo sapiens <400> 1157 Arg Arg Cys Cys His Ser Ala Thr Met Phe Glu Ala Arg Leu Val Gln Gly Ser Ile Leu Lys Lys Val Leu Glu Ala Leu Lys Asp Leu Ile Asn 20 Glu Ala Cys Trp Asp Ile Ser Ser Ser Gly Val Asn Leu Gln Ser Met 35 40

Asp Ser Ser His Val Ser Leu Val Gln Leu Thr Leu Arg Ser Glu Gly

Phe Asp Thr Tyr Arg Cys Asp Arg Asn Leu Ala Met Gly Val Asn Leu

70

1166

Thr Ser Met Ser Lys Ile Leu Lys Cys Ala Gly Asn Glu Asp Ile Ile 85 90 95

Thr Leu Arg Ala Glu Asp Asn Ala Asp Thr Leu Ala Leu Val Phe Glu
100 105 110

Ala Pro Asn Gln Glu Lys Val Ser Asp Tyr Glu Met Lys Leu Met Asp 115 120 125

Leu Asp Val Glu Gln Leu Gly Ile Pro Glu Gln Glu Tyr Ser Cys Val 130 135 140

Val Lys Met Pro Ser Gly Glu Phe Ala Arg Ile Cys Arg Asp Leu Ser 145 150 155 160

His Ile Gly Asp Ala Val Val Ile Ser Cys Ala Lys Asp Gly Val Lys 165 170 175

Phe Ser Ala Ser Gly Glu Leu Gly Asn Gly Asn Ile Lys Leu Ser Gln 180 185 190

Thr Ser Asn Val Asp Lys Glu Glu Glu Ala Val Thr Ile Glu Met Asn 195 200 205

Glu Pro Val Gln Leu Thr Phe Ala Leu Arg Tyr Leu Asn Phe Phe Thr 210 215 220

Lys Ala Thr Pro Leu Ser Ser Thr Val Thr Leu Ser Met Ser Ala Asp 225 230 235 240

Val Pro Leu Val Val Glu Tyr Lys Ile Ala Asp Met Gly His Leu Lys
245 250 255

Tyr Tyr Leu Ala Pro Lys Ile Glu Asp Glu Glu Gly Ser 260 265

<210> 1158

<211> 639

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (129)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

	2> (3 3> Xa	•	quals	s any	y of	the	nati	ural	ly o	ccur:	ring	L-ar	mino	acio	ds
	0> 1: Asp		Met	Ala 5	Thr	Thr	Gln	Ile	Ser 10	Lys	Asp	Glu	Leu	Asp 15	Glu
Leu	Lys	Glu	Ala 20	Phe	Ala	Lys	Val	Asp 25	Leu	Asn	Ser	Asn	Gly 30	Phe	Il∈
Cys	Asp	Tyr 35	Glu	Leu	His	Glu	Leu 40	Phe	Lys	Glu	Ala	Asn 45	Met	Pro	Leu
Pro	Gly 50	Tyr	Lys	Val	Arg	Glu 55	Ile	Ile	Gln	Lys	Leu 60	Met	Leu	Asp	Gly
Asp 65	Arg	Asn	Lys	Asp	Gly 70	Lys	Ile	Ser	Phe	Asp 75	Glu	Phe	Val	Tyr	11e
Phe	Gln	Glu	Val	Lys 85	Ser	Ser	Asp	Ile	.Ala 90	Lys	Thr	Phe	Arg	Lys 95	Ala
Ile	Asn	Arg	Lys 100	Glu	Gly	Ile	Cys	Ala 105	Leu	Gly	Gly	Thr	Ser 110	Glu	Leu
Ser	Ser	Glu 115	Gly	Thr	Gln	His	Ser 120	Tyr	Ser	Glu	Glu	Glu 125	Lys	Tyr	Ala
Xaa	Val 130	Asn	Trp	Ile	Asn	Lys 135	Ala	Leu	Glu	Asn	Asp 140	Pro	Asp	Cys	Arç
His 145	Val	Ile	Pro	Met	Xaa 150	Pro	Asn	Thr	Asp	Asp 155	Leu	Phe	Lys	Ala	Val 160
Gly	Asp	Gly	Ile	Val 165	Leu	Cys	Lys	Met	Ile 170	Asn	Leu	Ser	Val	Pro 175	Asp
Thr	Ile	Asp	Glu 180	Arg	Ala	Ile	Asn	Lys 185	Lys	Lys	Leu	Thr	Pro 190	Phe	Ile
Ile	Gln	Glu 195	Asn	Leu	Asn	Leu	Ala 200	Leu	Asn	Ser	Ala	Ser 205	Ala	Ile	Gly
Cys	His 210	Val	Val	Asn	Ile	Gly 215	Ala	Glu	Asp	Leu	Arg 220	Ala	Gly	Lys	Pro
His 225	Leu	Val	Leu	Gly	Leu 230	Leu	Trp	Gln	Ile	Ile 235	Lys	Ile	Gly	Leu	Phe 240
Ala	Asp	Ile		Leu 245		Arg	Asn		Ala 250		Ala	Ala	Leu	Leu 255	

Asp	Gly	Glu	Thr 260	Leu	Glu	Glu	Leu	Met 265	Lys	Leu	Ser	Pro	Glu 270	Glu	Leu
Leu	Leu	Arg 275	Trp	Ala	Asn	Phe	His 280	Leu	Glu	Asn	Ser	Gly 285	Trp	Gln	Lys
Ile	Asn 290	Asn	Phe	Ser	Ala	Asp 295	Ile	Lys	Leu	Ile	Asp 300	Phe	Ser	Asn	Ser
Val 305	Lys	Asp	Ser	Lys	Ala 310	Tyr	Phe	His	Leu	Leu 315	Asn	Gln	Ile	Ala	Pro 320
Lys	Gly	Gln	Lys	Glu 325	Gly	Glu	Pro	Arg	Ile 330	Asp	Ile	Asn	Met	Ser 335	Gly
Phe	Asn	Glu	Thr 340	Asp	Asp	Leu	Lys	Arg 345	Ala	Glu	Ser	Met	Leu 350	Gln	Gln
Ala	Asp	Lys 355	Leu	Gly	Cys	Arg	Gln 360	Phe	Val	Thr	Pro	Ala 365	Asp	Val	Val
Ser	Gly 370	Asn	Pro	Lys	Leu	Asn 375	Leu	Ala	Phe	Val	Ala 380	Asn	Leu	Phe	Asn
Lys 385	Tyr	Pro	Ala	Leu	Thr 390	Lys	Pro	Glu	Asn	Gln 395	Asp	Ile	Asp	Trp	Thr 400
Leu	Leu	Glu	Gly	Glu 405	Thr	Arg	Glu	Glu	Arg 410	Thr	Phe	Arg	Asn	Trp 415	Met
Asn	Ser	Leu	Gly 420	Val	Asn	Pro	His	Val 425	Asn	His	Leu	Tyr	Ala 430	Asp	Leu
Gln	Asp	Ala 435	Leu	Val	Ile	Leu	Gln 440	Leu	Tyr	Glu	Arg	Ile 445	Lys	Val	Pro
Val	Asp 450	Trp	Ser	Lys	Val	Asn 455	Lys	Pro	Pro	Tyr	Pro 460	Lys	Leu	Gly	Ala
Asn 465	Met	Lys	Lys	Leu	Glu 470	Asn	Cys	Asn	Tyr	Ala 475	Val	Glu	Leu	Gly	Lys 480
His	Pro	Ala	Lys	Phe 485	Ser	Leu	Val	Gly	Ile 490	_	Gly	Gln	Asp	Leu 495	Asn
Asp	Gly	Asn	Gln 500	Thr	Leu	Thr	Leu	Ala 505	Leu	Val	Trp	Gln	Leu 510	Met	Arg
Arg	Tyr	Thr 515	Leu	Asn	Val	Leu	Glu 520	Asp	Leu	Gly	Asp	Gly 525	Gln	Lys	Ala

1169

Asn Asp Asp Ile Ile Val Asn Trp Val Asn Arg Thr Leu Ser Glu Ala 530 540

Gly Lys Ser Thr Ser Ile Gln Ser Phe Lys Asp Lys Thr Ile Ser Ser 545 550 555 560

Ser Leu Ala Val Val Asp Leu Ile Asp Ala Ile Gln Pro Gly Cys Ile 565 570 575

Asn Tyr Asp Leu Val Lys Ser Gly Asn Leu Thr Glu Asp Asp Lys His
580 585 590

Asn Asn Ala Lys Tyr Ala Val Ser Met Ala Arg Arg Ile Gly Ala Arg 595 600 605

Val Tyr Ala Leu Pro Glu Asp Leu Val Glu Val Lys Pro Lys Met Val 610 615 620

Met Thr Val Phe Ala Cys Leu Met Gly Arg Gly Met Lys Arg Val 625 630 635

<210> 1159

<211> 63

<212> PRT

<213> Homo sapiens

<400> 1159

Thr Ile Trp Pro Leu Asn Phe His Arg Lys Asn Asp Pro Thr Phe Leu 1 5 10 15

Ser Met Ser Tyr Leu Ile Ser Arg Ser Trp Asp Gly Leu Thr Ile Leu 20 25 30

Val Tyr Ile Leu Asp Thr Glu Arg Cys Tyr Ala Ser Val Ile Ile Pro 35 40 45

Arg Leu Glu Ile Gly Arg Ala Lys Lys Val Leu Leu Phe Phe Leu 50 55 60

<210> 1160

<211> 207

<212> PRT

<213> Homo sapiens

<400> 1160

Glu Val Tyr Gly Gly Ser Leu Asp Lys Glu Phe Asp Glu Ser Ser Pro

1170

10 15 1 Lys Gln Pro Thr Asn Pro Tyr Ala Ser Ser Lys Ala Ala Ala Glu Cys 25 20 Phe Val Gln Ser Tyr Trp Glu Gln Tyr Lys Phe Pro Val Val Ile Thr Arg Ser Ser Asn Val Tyr Gly Pro His Gln Tyr Pro Glu Lys Val Ile 55 Pro Lys Phe Ile Ser Leu Leu Gln His Asn Arg Lys Cys Cys Ile His 70 65 Gly Ser Gly Leu Gln Thr Arg Asn Phe Leu Tyr Ala Thr Asp Val Val 90 Glu Ala Phe Leu Thr Val Leu Lys Lys Gly Lys Pro Gly Glu Ile Tyr 105 Asn Ile Gly Thr Asn Phe Glu Met Ser Val Val Gln Leu Ala Lys Glu 115 120 Leu Ile Gln Leu Ile Lys Glu Thr Asn Ser Glu Ser Glu Met Glu Asn 135 Trp Val Asp Tyr Val Asn Asp Arg Pro Thr Asn Asp Met Arg Tyr Pro 150 155 Met Lys Ser Glu Lys Ile His Gly Leu Gly Trp Arg Pro Lys Val Pro 165 170 Trp Lys Glu Gly Ile Lys Lys Thr Ile Glu Trp Tyr Arg Glu Asn Phe His Asn Trp Lys Asn Val Glu Lys Ala Leu Glu Pro Phe Pro Val

<210> 1161

<211> 848

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (815)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<22	2> (844)													
			qual	s an	y of	the	nati	ural	ly o	ccur	ring	L-a	mino	acio	ds
)> 1: -		_			em 1				~ 1	01	D)	*1 -	~ 7_	•
Ala 1	Leu	Gly	Leu	Gly 5	Val	Thr	Met	Ala	Thr 10	Glu	GLu	Phe	IIe	11e 15	Arg
Ile	Pro	Pro	Туг 20	His	Tyr	Ile	His	Val 25	Leu	Asp	Gln	Asn	Ser 30	Asn	Val
Ser	Arg	Val 35	Glu	Val	Gly	Pro	Lys 40	Thr	Tyr	Ile	Arg	Gln 45	Asp	Asn	Glu
Arg	Val 50	Leu	Phe	Ala	Pro	Met 55	Arg	Met	Val	Thr	Val 60	Pro	Pro	Arg	His
Tyr 65	Cys	Thr	Val	Ala	Asn 70	Pro	Val	Ser	Arg	Asp 75	Ala	Gln	Gly	Leu	Val 80
Leu	Phe	Asp	Val	Thr 85	Gly	Gln	Val	Arg	Leu 90	Arg	His	Ala	Asp	Leu 95	Glu
Ile	Arg	Leu	Ala 100	Gln	Asp	Pro	Phe	Pro 105	Leu	Tyr	Pro	Gly	Glu 110	Val	Leu
Glu	Lys	Asp 115	Ile	Thr	Pro	Leu	Gln 120	Val	Val	Leu	Pro	Asn 125	Thr	Ala	Leu
His	Leu 130	Lys	Ala	Leu	Leu	Asp 135	Phe	Glu	Asp	Lys	Asp 140	Gly	Asp	Lys	Val
Val 145	Ala	Gly	Asp	Glu	Trp 150	Leu	Phe	Glu	Gly	Pro 155	Gly	Thr	Tyr	Ile	Pro 160
Arg	Lys	Glu	Val	Glu 165	Val	Val	Glu	Ile	Ile 170	Gln	Ala	Thr	Ile	Ile 175	Arg
Gln	Asn		Ala 180	Leu	Arg	Leu	_	Ala 185	-	Lys	Glu	Cys	Trp 190	Asp	Arg
Asp	Gly	Lys 195	Glu	Arg	Val	Thr	Gly 200	Glu	Glu	Trp	Leu	Val 205	Thr	Thr	Val
Gly	Ala 210	Tyr	Leu	Pro	Ala	Val 215	Phe	Glu	Glu	Val	Leu 220	Asp	Leu	Val	Asp
Ala 225	Val	Ile	Leu	Thr	Glu 230	Lys	Thr	Ala	Leu	His 235	Leu	Arg	Ala	Arg	Arg 240
Asn	Phe	Ara	Asp	Phe	Arq	Gly	Val	Ser	Ara	Arg	Thr	Gly	Glu	Glu	Trp

Leu Val Thr Val Gln Asp Thr Glu Ala His Val Pro Asp Val His Glu Glu Val Leu Gly Val Val Pro Ile Thr Thr Leu Gly Pro His Asn Tyr Cys Val Ile Leu Asp Pro Val Gly Pro Asp Gly Lys Asn Gln Leu Gly Gln Lys Arg Val Val Lys Gly Glu Lys Ser Phe Phe Leu Gln Pro Gly Glu Gln Leu Glu Gln Gly Ile Gln Asp Val Tyr Val Leu Ser Glu Gln Gln Gly Leu Leu Arg Ala Leu Gln Pro Leu Glu Glu Gly Glu Asp Glu Glu Lys Val Ser His Gln Ala Gly Asp His Trp Leu Ile Arg Gly Pro Leu Glu Tyr Val Pro Ser Ala Lys Val Glu Val Val Glu Glu Arg Gln Ala Ile Pro Leu Asp Glu Asn Glu Gly Ile Tyr Val Gln Asp Val Lys Thr Gly Lys Val Arg Ala Val Ile Gly Ser Thr Tyr Met Leu Thr Gln Asp Glu Val Leu Trp Glu Lys Glu Leu Pro Pro Gly Val Glu Glu Leu Leu Asn Lys Gly Gln Asp Pro Leu Ala Asp Arg Gly Glu Lys Asp Thr Ala Lys Ser Leu Gln Pro Leu Ala Pro Arg Asn Lys Thr Arg Val Val Ser Tyr Arg Val Pro His Asn Ala Ala Val Gln Val Tyr Asp Tyr Arg Glu Lys Arg Ala Arg. Val Val Phe Gly Pro Glu Leu Val Ser Leu Gly Pro Glu Glu Gln Phe Thr Val Leu Ser Leu Ser Ala Gly Arg Pro Lys Arg Pro His Ala Arg Arg Ala Leu Cys Leu Leu Gly Pro Asp

		515					520					525			
Phe	Phe 530	Thr	Asp	Val	Ile	Thr 535	Ile	Glu	Thr	Ala	Asp 540	His	Ala	Arg	Leu
Gln 545	Leu	Gln	Leu	Ala	Туг 550	Asn	Trp	His	Phe	Glu 555	Val	Asn	Asp	Arg	Lys 560
Asp	Pro	Gln	Glu	Thr 565	Ala	Lys	Leu	Phe	Ser 570	Val	Pro	Asp	Phe	Val 575	Gly
Asp	Ala	Cys	Lys 580	Ala	Ile	Ala	Ser	Arg 585	Val	Arg	Gly	Ala	Val 590	Ala	Ser
Val	Thr	Phe 595	Asp	Asp	Phe	His	Lys 600	Asn	Ser	Ala	Arg	Ile 605	Ile	Arg	Thr
Ala	Val 610	Phe	Gly	Phe	Glu	Thr 615	Ser	Glu	Ala	Lys	Gly 620	Pro	Asp	Gly	Met
Ala 625	Leu	Pro	Arg	Pro	Arg 630	Asp	Gln	Ala	Val	Phe 635	Pro	Gln	Asn	Gly	Leu 640
Val	Val	Ser	Ser	Val 645	Asp	Val	Gln	Ser	Val 650	Glu	Pro	Val	Asp	Gln 655	Arg
Thr	Arg	Asp	Ala 660	Leu	Gln	Arg	Ser	Val 665	Gln	Leu	Ala	Ile	Glu 670	Ile	Thr
Thr	Asn	Ser 675	Gln	Glu	Ala	Ala	Ala 680	Lys	His	Glu	Ala	Gln 685	Arg	Leu	Glu
Gln	Glu 690	Ala	Arg	Gly	Arg	Leu 695	Glu	Arg	Gln	Lys	Ile 700	Leu	Asp	Gln	Ser
Glu 705	Ala	Glu	Lys	Ala	Arg 710	Lys	Glu	Leu	Leu	Glu 715	Leu	Glu	Ala	Leu	Ser 720
Met	Ala	Val	Glu	Ser 725	Thr	Gly	Thr	Ala	Lys 730	Ala	Glu	Ala	Glu	Ser 735	Arg
Ala	Glu	Ala	Ala 740	Arg	Ile	Glu	Gly	Glu 745	Gly	Ser	Val	Leu	Gln 750	Ala	Lys
Leu	Lys	Ala 755	Gln	Ala	Leu	Ala	Ile 760	Glu	Thr	Glu	Ala	Glu 765	Leu	Gln	Arg
Val	Gln 770	Lys	Val	Arg	Glu	Leu 775	Glu	Leu	Val	Tyr	Ala 780	Arg	Ala	Gln	Leu
Glu	Leu	Glu	Val	Ser	Lys	Ala	Gln	Gln	Leu	Ala	Glu	Val	Glu	Val	Lys

1174

785 790 795 800

Lys Phe Lys Gln Met Thr Glu Ala Ile Gly Pro Ser Thr Ile Xaa Asp 805 810 815

Leu Ala Val Ala Gly Pro Glu Met Gln Val Lys Leu Leu Gln Ser Leu 820 825 830

Gly Leu Lys Ser Thr Leu Ile Thr Asp Gly Phe Xaa Ser Ile Asn Phe 835 840 845

<210> 1162

<211> 58

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1162

Phe Xaa Val Gly Ile Val Asn Phe Ser Gln Pro Pro His Ala Ala Gly
1 5 10 15

Glu Cys Gly Cys Ser Ser Ser Glu Met Leu Thr Xaa Lys Arg Glu Val 20 25 30

Lys Gln Ser Arg Tyr Val Gln Pro Cys Leu Gln Asn Pro Ser Leu Ser 35 40 45

Ser Leu Ile Arg Ser Phe Leu Val Phe Tyr 50 55

<210> 1163

<211> 565

<212> PRT

<213> Homo sapiens

)> 13														
Ile 1	Pro	Gly	Ser	Thr 5	His	Ala	Ser	Ala	Gly 10	Asn	Leu	Asp	Ser	Pro 15	Glu
Gly	Gly	Phe	Asp 20	Ala	Ile	Met	Gln	Val 25	Ala	Val	Сув	Gly	Ser 30	Leu	Ile
Gly	Trp	Arg 35	Asn	Val	Thr	Arg	Leu 40	Leu	Val	Phe	Ser	Thr 45	Asp	Ala	Gl
Phe	His 50	Phe	Ala	Gly	Asp	Gly 55	Lys	Leu	Gly	Gly	Ile 60	Val	Leu	Pro	Asr
Asp 65	Gly	Gln	Cys	His	Leu 70	Glu	Asn	Asn	Met	Tyr 75	Thr	Met	Ser	His	ТУ1 80
Tyr	Asp	Tyr	Pro	Ser 85	Ile	Ala	His	Leu	Val 90	Gln	Lys	Leu	Ser	Glu 95	Asr
Asn	Ile	Gln	Thr 100	Ile	Phe	Ala	Val	Thr 105	Glu	Glu	Phe	Gln	Pro 110	Val	Туі
Lys	Glu	Leu 115	Lys	Asn	Leu	Ile	Pro 120	Lys	Ser	Ala	Val	Gly 125	Thr	Leu	Sei
Ala	Asn 130	Ser	Ser	Asn	Val	Ile 135	Gln	Leu	Ile	Ile	Asp 140	Ala	Tyr	Asn	Sei
Leu 145	Ser	Ser	Glu	Val	Ile 150	Leu	Glu	Asn	Gly	Lys 155	Leu	Ser	Glu	Gly	Va]
Thr	Ile	ser	Tyr	Lys 165	Ser	Tyr	Cys	Lys	Asn 170	Gly	Val	Asn	Gly	Thr 175	Gl
Glu	Asn	Gly	Arg 180	Lys	Cys	Ser	Asn	Ile 185	Ser	Ile	Gly	Asp	Glu 190	Val	Glr
Phe	Glu	Ile 195	Ser	Ile	Thr	Ser	Asn 200		Cys	Pro	Lys	Lys 205	Asp	Ser	Asp
Ser	Phe 210	Lys	Ile	Arg	Pro	Leu 215	Gly	Phe	Thr	Glu	Glu 220	Val	Glu	Val	Ile
Leu 225	Gln	Tyr	Ile	Cys	Glu 230	Cys	Glu	Cys	Gln	Ser 235	Glu	Gly	Ile	Pro	Gl: 240
Ser	Pro	Lys	Cys	His 245	Glu	Gly	Asn	Gly	Thr 250	Phe	Glu	Cys	Gly	Ala 255	Суя
Arg	Cys	Asn	Glu 260	Gly	Arg	Val	Gly	Arg 265	His	Cys	Glu	Cys	Ser 270	Thr	Asp

Glu	Val	Asn 275	Ser	Glu	Asp	Met	Asp 280	Ala	Tyr	Cys	Arg	Lys 285	Glu	Asn	Ser
Ser	Glu 290	Ile	Cys	Ser	Asn	Asn 295	Gly	Glu	Cys	Val	Cys 300	Gly	Gln	Cys	Val
Cys 305	Arg	Lys	Arg	Asp	Asn 310	Thr	Asn	Glu	Ile	Tyr 315	Ser	Gly	Lys	Phe	Cys 320
Glu	Cys	Asp	Asn	Phe 325	Asn	Cys	Asp	Arg	Ser 330	Asn	Gly	Leu	Ile	Cys 335	Gly
Gly	Asn	Gly	Val 340	Cys	Lys	Cys	Arg	Val 345	Cys	Glu	Cys	Asn	Pro 350	Asn	Tyr
Thr	Gly	Ser 355	Ala	Cys	Asp	Cys	Ser 360	Leu	Asp	Thr	Ser	Thr 365	Cys	Glu	Ala
Ser	Asn 370	Gly	Gln	Ile	Cys	Asn 375	Gly	Arg	Gly	Ile	Cys 380	Glu	Cys	Gly	Val
Cys 385	Lys	Cys	Thr	Asp	Pro 390	Lys	Phe	Gln	Gly	Gln 395	Thr	Cys	Glu	Met	Cys 400
Gln	Thr	Cys	Leu	Gly 405	Val	Cys	Ala	Glu	His 410	Lys	Glu	Cys	Val	Gln 415	Cys
Arg	Ala	Phe	Asn 420	Lys	Gly	Glu	Lys	Lys 425	Asp	Thr	Cys	Thr	Gln 430	Glu	Cys
Ser	Tyr	Phe 435	Asn	Ile	Thr	Lys	Val 440	Glu	Ser	Arg	Asp	Lys 445	Leu	Pro	Gln
Pro	Val 450	Gln	Pro	Asp	Pro	Val 455	Ser	His	Cys	Lys	Glu 460	Lys	Asp	Val	Asp
Asp 465	Cys	Trp	Phe	Tyr	Phe 470	Thr	Tyr	Ser	Val	Asn 475	Gly	Asn	Asn	Glu	Val 480
Met	Val	His	Val	Val 485	Glu	Asn	Pro	Glu	Cys 490	Pro	Thr	Gly	Pro	Asp 495	Ile
Ile	Pro	Ile	Val 500	Ala	Gly	Val	Val	Ala 505	Gly	Ile	Val	Leu	Ile 510	Gly	Leu
Ala	Leu	Leu 515	Leu	Ile	Trp	Lys	Leu 520	Leu	Met	Ile	Ile	His 525	Asp	Arg	Arg
Glu	Phe 530	Ala	Lys	Phe	Glu	Lys 535	Glu	Lys	Met	Asn	Ala 540	Lys	Trp	Asp	Thr

1177

Gly Glu Asn Pro Ile Tyr Lys Ser Ala Val Thr Thr Val Val Asn Pro 545 550 555 560

Lys Tyr Glu Gly Lys 565

<210> 1164

<211> 138

<212> PRT

<213> Homo sapiens

<400> 1164

Gly Thr Ala Gly Gly Ala Gly Gly Gln Arg Glu Val Arg Gly Cys Ser 1 5 10 15

Ala Gln Glu Thr Met Ser Gly Gly Ser Ser Cys Ser Gln Thr Pro Ser 20 25 30

Arg Ala Ile Pro Ala Thr Arg Arg Val Val Leu Gly Asp Gly Val Gln 35 40 45

Leu Pro Pro Gly Asp Tyr Ser Thr Thr Pro Gly Gly Thr Leu Phe Ser 50 55 60

Thr Thr Pro Gly Gly Thr Arg Ile Ile Tyr Asp Arg Lys Phe Leu Met
65 70 75 80

Glu Cys Arg Asn Ser Pro Val Thr Lys Thr Pro Pro Arg Asp Leu Pro
85 90 95

Thr Ile Pro Gly Val Thr Ser Pro Ser Ser Asp Glu Pro Pro Met Glu
100 105 110

Ala Ser Gln Ser His Leu Arg Asn Ser Pro Glu Asp Lys Arg Ala Gly
115 120 125

Gly Glu Glu Ser Gln Phe Glu Met Asp Ile 130 135

<210> 1165

<211> 407

<212> PRT

<213> Homo sapiens

<400> 1165

Ala Ala Cys Gln Pro Arg Cys Cys Ser Ser Cys Cys Gly Thr Ala

1				5					10					15	
Asp	Arg	Ala	Ala 20	Ala	Pro	Leu	Ser	Pro 25	Leu	Gln	Ala	Pro	Ile 30	Trp	Ala
Pro	Ala	Thr 35	Ser	Met	Asp	Ala	Arg 40	Arg	Val	Pro	Gln	Lys 45	Asp	Leu	Arç
Val	Lys 50	Lys	Asn	Leu	Lys	Lys 55	Phe	Arg	Tyr	Val	Lys 60	Leu	Ile	Ser	Met
Glu 65	Thr	Ser	Ser	Ser	Ser 70	Asp	Asp	Ser	Cys	Asp 75	Ser	Phe	Ala	Ser	Asp 80
Asn	Phe	Ala	Asn	Thr 85	Arg	Leu	Gln	Ser	Val 90	Arg	Glu	Gly	Cys	Arg 95	Thr
Arg	Ser	Gln	Cys 100	Arg	His	Ser	Gly	Pro 105	Leu	Arg	Val	Ala	Met 110	Lys	Phe
Pro	Ala	Arg 115	Ser	Thr	Arg	Gly	Ala 120	Thr	Asn	Lys	Lys	Ala 125	Glu	Ser	Arg
Gln	Pro 130	Ser	Glu	Asn	Ser	Val 135	Thr	Asp	Ser	Asn	Ser 140	Asp	Ser	Glu	Asp
Glu 145	Ser	Gly	Met	Asn	Phe 150	Leu	Glu	Lys	Arg	Ala 155	Leu	Asn	Ile	Lys	Gln 160
Asn	Lys	Ala	Met	Leu 165	Ala	Lys	Leu	Met	Ser 170	Glu	Leu	Glu	Ser	Phe 175	Pro
Gly	Ser	Phe	Arg 180	Gly	Arg	His	Pro	Leu 185	Pro	Gly	Ser	Asp	Ser 190	Gln	Ser
Arg	Arg	Pro 195	Arg	Arg	Arg	Thr	Phe 200	Pro	Gly	Val	Ala	Ser 205	Arg	Arg	Asn
Pro	Glu 210	Arg	Arg	Ala	Arg	Pro 215	Leu	Thr	Arg	Ser	Arg 220	Ser	Arg	Ile	Leu
31y 225	Ser	Leu	Asp	Ala	Leu 230	Pro	Met	Glu	Glu	Glu 235	Glu	Glu	Glu	Asp	Lys 240
ryr	Met	Leu	Val	Arg 245	Lys	Arg	Lys	Thr	Val 250	Asp	Gly	Tyr	Met	Asn 255	Glu
Asp	Asp	Leu	Pro 260	Arg	Ser	Arg	Arg	Ser 265	Arg	Ser	Ser	Val	Thr 270	Leu	Pro
	T10	т1.	7 ~~	Drc	1727	C1	C111	Tlo		Clu	Clu	Clu	Tour	Glu	7 ~ ~

1179

285 275 280 Val Cys Ser Asn Ser Arg Glu Lys Ile Tyr Asn Arg Ser Leu Gly Ser 295 290 Thr Cys His Gln Cys Arg Gln Lys Thr Ile Asp Thr Lys Thr Asn Cys Arg Asn Pro Asp Cys Trp Gly Val Arg Gly Gln Phe Cys Gly Pro Cys 330 325 Leu Arg Asn Arg Tyr Gly Glu Glu Val Arg Asp Ala Leu Leu Asp Pro 340 345 Asn Trp His Cys Pro Pro Cys Arg Gly Ile Cys Asn Cys Ser Phe Cys 360 Arg Gln Arg Asp Gly Arg Cys Ala Thr Gly Val Leu Val Tyr Leu Ala 375 380 Lys Tyr His Gly Phe Gly Asn Val His Ala Tyr Leu Lys Ser Leu Lys 385 390 395 400 Gln Glu Phe Glu Met Gln Ala 405 <210> 1166 <211> 240 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (197) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (201) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

<223> Xaa equals any of the naturally occurring L-amino acids

<222> (202)

<220>
<221> SITE
<222> (219)

<22	3> Xa	aa e	quals	s any	y of	the	nati	ıral	ly o	ccuri	ring	L-ar	mino	acio	ds
	0> 13 Asp		Arg	Pro 5	Thr	Gly	Asp	Ala	Phe 10	Val	Leu	Phe	Ala	Cys 15	Glu
Glu	Tyr	Ala	Gln 20	Asn	Ala	Leu	Arg	Lys 25	His	Lys	Asp	Leu	Leu 30	Gly	Lys
Arg	Tyr	Ile 35	Glu	Leu	Phe	Arg	Ser 40	Thr	Ala	Ala	Glu	Val 45	Gln	Gln	Va
Leu	Asn 50	Arg	Phe	Ser	Ser	Ala 55	Pro	Leu	Ile	Pro	Leu 60	Pro	Thr	Pro	Pro
Ile 65	Ile	Pro	Val	Leu	Pro 70	Gln	Gln	Phe	Val	Pro 75	Pro	Thr	Asn	Val	Arg 80
Asp	Cys	Ile	Arg	Leu 85	Arg	Gly	Leu	Pro	Туг 90	Ala	Ala	Thr	Ile	Glu 95	Asp
Ile	Leu	Asp	Phe 100	Leu	Gly	Glu	Phe	Ala 105	Thr	Asp	Ile	Arg	Thr 110	His	Gl
Val	His	Met 115	Val	Leu	Asn	His	Gln 120	Gly	Arg	Pro	Ser	Gly 125	Asp	Ala	Phe
Ile	Gln 130	Met	Lys	Ser	Ala	Asp 135	Arg	Ala	Phe	Met	Ala 140	Ala	Gln	Lys	Cys
His 145	Lys	Lys	Asn	Met	Lys 150	Asp	Arg	Tyr	Val	Glu 155	Val	Phe	Gln	Cys	Sei 160
Ala	Glu	Glu	Met	Asn 165	Phe	Val	Leu	Met	Gly 170	Gly	Thr	Leu	Asn	Arg 175	Asr
Зlу	Leu	Ser	Pro 180	Pro	Pro	Cys	Leu	Ser 185	Pro	Pro	Ser	Tyr	Thr 190	Phe	Pro
Ala	Pro	Ala 195	Ala	Xaa	Ile	Pro	Thr 200	Xaa	Xaa	Ala	Ile	Tyr 205	Gln	Pro	Ser
/al	Ile 210	Leu	Asn	Pro	Arg	Ala 215	Leu	Gln	Pro	Xaa	Thr 220	Ala	Tyr	туг	Pro
Ala 225	Gly	Thr	Gln	Leu	Phe 230	Met	Asn	Tyr	Thr	Ala 235	Tyr	Tyr	Pro	Ser	Val

1181

<210> 1167 <211> 106 <212> PRT <213> Homo sapiens <400> 1167 Gly Gly Tyr Ser Val Asp Ser Pro Thr Leu Thr Arg Phe Phe Thr Phe 20 55 70

His Phe Ile Leu Pro Phe Ile Ile Ala Ala Leu Ala Leu His Leu

Leu Phe Leu His Glu Thr Gly Ser Asn Asn Pro Leu Gly Ile Thr Ser

25

His Ser Asp Lys Ile Thr Phe His Pro Tyr Tyr Thr Ile Lys Asp Ala

40

Leu Gly Leu Leu Phe Leu Leu Ser Leu Met Thr Leu Thr Leu Phe 75

Ser Pro Asp Leu Leu Gly Asp Pro Asp Asn Tyr Thr Leu Ala Asn Pro

Leu Asn Thr Pro Pro His Ile Lys Pro Glu 100

<210> 1168

<211> 210

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1168

Gln His Val Gln Arg Glu Trp Ser Gly His Gly Glu Asp Arg Gly Asp 5

Gly Glu Asp Ala Glu Arg Gly Ser Cys Arg Glu Glu Pro Ala His Gly 20

Val Glu Gly Ala Gly Asp Gly Ala Ala Ala Gly Pro Gly Gly Gly 40 35

1182

Ala Ala Glu Ala Xaa Gln Val Glu Arg Arg Leu Gln Ser Glu Ser Ala 50 55 60

Arg Arg Gln Gln Leu Val Glu Lys Glu Val Lys Met Arg Glu Lys Gln 65 70 75 80

Phe Ser Gln Ala Arg Pro Leu Thr Arg Tyr Leu Pro Ile Arg Lys Glu
85 90 95

Asp Phe Asp Leu Lys Thr His Ile Glu Ser Ser Gly His Gly Val Asp 100 105 110

Thr Cys Leu His Val Val Leu Ser Ser Lys Val Cys Arg Gly Tyr Leu 115 120 125

Val Lys Met Gly Gly Lys Ile Lys Ser Trp Lys Lys Arg Trp Phe Val 130 135 140

Phe Asp Arg Leu Lys Arg Thr Leu Ser Tyr Tyr Val Asp Lys His Glu 145 150 155 160

Thr Lys Leu Lys Gly Val Ile Tyr Phe Gln Ala Ile Glu Gly Ser Val 165 170 175

Leu Arg Pro Pro Ala Pro Val Gln Pro Arg Arg Gly Phe Ser Ala Ser 180 185 190

Thr Met Val Thr Glu Lys Pro Glu Pro Ser Pro His Leu Leu Arg Lys
195 200 205

Asp Pro 210

<210> 1169

<211> 181

<212> PRT

<213> Homo sapiens

<400> 1169

Thr Ser Lys Met Arg Ser Leu Glu Thr Leu Gly Arg Pro Lys Pro Glu
1 5 10 15

Cys Glu Gly Tyr Asp Pro Asn Ala Leu Tyr Cys Ile Cys Arg Gln Pro 20 25 30

His Asn Asn Arg Phe Met Ile Cys Cys Asp Arg Cys Glu Glu Trp Phe 35 40 45

His Gly Asp Cys Val Gly Ile Ser Glu Ala Arg Gly Arg Leu Leu Glu

1183

60 50 55 Arg Asn Gly Glu Asp Tyr Ile Cys Pro Asn Cys Thr Ile Leu Gln Val 65 70 Gln Asp Glu Thr His Ser Glu Thr Ala Asp Gln Glu Ala Lys Trp Arg Pro Gly Asp Ala Asp Gly Thr Asp Cys Thr Ser Ile Gly Thr Ile 105 Glu Gln Lys Ser Ser Glu Asp Gln Gly Ile Lys Gly Arg Ile Glu Lys 115 120 Ala Ala Asn Pro Ser Gly Lys Lys Leu Lys Ile Phe Gln Pro Val 135 Ile Glu Ala Pro Gly Ala Ser Lys Cys Ile Gly Pro Gly Cys Cys His 150 155 Val Ala His Pro Thr Arg Cys Thr Ala Val Met Thr Val Ser Ser Asn 170 165 Thr Pro Gln Arg Gln 180 <210> 1170 <211> 166 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (18) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (131) <223> Xaa equals any of the naturally occurring L-amino acids

Ala Gln Xaa Leu Ser Ser Pro Val Arg Gly Ile Ser Gly Glu Gln Ser

5

10

<400> 1170

1184

Thr Xaa Gly Ser Phe Pro Leu Arg Tyr Val Gln Asp Gln Val Ala Ala
20 25 30

Pro Phe Gln Leu Ser Asn His Thr Gly Arg Ile Lys Val Val Phe Thr 35 40 45

Pro Ser Ile Cys Lys Val Thr Cys Thr Lys Gly Ser Cys Gln Asn Ser 50 55 60

Cys Glu Lys Gly Asn Thr Thr Thr Leu Ile Ser Glu Asn Gly His Ala
65 70 75 80

Ala Asp Thr Leu Thr Ala Thr Asn Phe Arg Val Val Ile Cys His Leu 85 90 95

Pro Cys Met Asn Gly Gly Gln Cys Ser Ser Arg Asp Lys Cys Gln Cys 100 105 110

Pro Pro Asn Phe Thr Gly Lys Leu Cys Gln Ile Pro Val His Gly Ala 115 120 125

Gly Thr His Val Ile His Ser Thr His Thr Leu Pro Leu Thr Val Thr 145 150 155 160

Ser Gln Gln Glu Ser Lys 165

<210> 1171

<211> 37

<212> PRT

<213> Homo sapiens

<400> 1171

Asp Leu Ser Val Asn Phe Trp Glu Pro Asn Gly Phe Gly His Asp Phe 1 5 10 15

Pro Ala His Tyr Ile Leu Thr Gln Asn Phe Phe Arg Met Ala Phe Thr 20 25 30

Ser Thr Pro Glu Ile

WO 00/55350

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<211> 169
<212> PRT
<213> Homo sapiens
<220>
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<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (163)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (167)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1172
Arg Gly Ala Met Val Ser Cys Arg Pro Gly Cys Cys Pro Trp Thr
                                     10
                                                          15
Pro Ala Val Leu Arg Xaa Ser Val Arg Gly Thr Phe Tyr Ser Pro Pro
                                  25
             20
Glu Ser Phe Ala Gly Ser Asp Asn Glu Ser Asp Glu Glu Val Ala Gly
Lys Lys Ser Phe Ser Ala Gln Glu Arg Glu Tyr Ile Arg Gln Gly Lys
                         55
Glu Ala Thr Ala Val Xaa Asp Gln Ile Leu Ala Gln Glu Glu Asn Trp
                                         75
                                                              80
 65
                     70
Lys Phe Glu Lys Asn Asn Glu Tyr Gly Asp Thr Val Tyr Thr Ile Glu
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1186

85 90 95 Val Pro Phe His Gly Lys Thr Phe Ile Leu Lys Thr Phe Leu Pro Cys 105 100 Pro Ala Xaa Xaa Val Tyr Gln Glu Val Ile Leu Gln Pro Glu Arg Met 120 Val Leu Trp Asn Lys Thr Val Thr Ala Cys Gln Ile Leu Gln Arg Val 135 Glu Asp Asn Thr Leu Ile Ser Tyr Asp Val Ser Ala Arg Gly Cys Gly 155 145 150 Arg Arg Xaa Leu Pro Gln Xaa Thr Ser 165 <210> 1173 <211> 180 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (171) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1173 Glu Tyr Gly Asp Thr Val Tyr Thr Ile Glu Val Pro Phe His Gly Lys Thr Phe Ile Leu Lys Thr Phe Leu Pro Cys Pro Ala Glu Leu Val Tyr 20 25 Gln Glu Val Ile Leu Gln Pro Glu Arg Met Val Leu Trp Asn Lys Thr 40 Val Thr Ala Cys Gln Ile Leu Gln Arg Val Glu Asp Asn Thr Leu Ile Ser Tyr Asp Val Ser Ala Gly Ala Ala Gly Gly Val Val Ser Pro Arg 65 70 75 Asp Phe Val Asn Val Arg Arg Ile Glu Arg Arg Asp Arg Tyr Leu

Ser Ser Gly Ile Ala Thr Ser His Ser Ala Lys Pro Pro Thr His Lys

105

1187

Tyr Val Arg Gly Glu Asn Gly Pro Gly Gly Phe Ile Val Leu Lys Ser 115 120 125

Ala Ser Asn Pro Arg Val Cys Thr Phe Val Trp Ile Leu Asn Thr Asp 130 135 140

Leu Lys Gly Arg Leu Pro Arg Tyr Leu Ile His Gln Ser Leu Ala Ala 145 150 155 160

Thr Met Phe Glu Phe Ala Phe His Leu Arg Xaa Arg Ile Ser Glu Leu 165 170 175

Gly Ala Arg Ala 180

<210> 1174

<211> 436

<212> PRT

<213> Homo sapiens

<220>

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<222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (426)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1174

Arg His Gln Arg Arg Arg Ser Val Trp Arg Ser Arg Gly Xaa Cys Cys 1 5 10 15

Arg Cys Cys Cys Thr Asn Arg Arg Ser Pro Gln Pro Cys Ala Ser Ser 20 25 30

Leu Pro Pro Arg Thr Gly Glu Lys Gln Pro Arg Asn Phe Met Asn Lys
35 40 45

His Gln Lys Pro Val Leu Thr Gly Gln Arg Phe Lys Thr Arg Lys Arg
50 55 60

Asp Glu Lys Glu Lys Phe Glu Pro Thr Val Phe Arg Asp Thr Leu Val 65 70 75 80

Gln Gly Leu Asn Glu Ala Gly Asp Asp Leu Glu Ala Val Ala Lys Phe
85 90 95

Leu	Asp	Ser	Thr 100	Gly	Ser	Arg	Leu	Asp 105	Tyr	Arg	Arg	Tyr	Ala 110	Asp	Thr
Leu	Phe	Asp 115	Ile	Leu	Val	Ala	Gly 120	Ser	Met	Leu	Ala	Pro 125	Gly	Gly	Thr
Arg	Ile 130	Asp	Asp	Gly	Asp	Lys 135	Thr	Lys	Met	Thr	Asn 140	His	Cys	Val	Phe
Ser 145	Ala	Asn	Glu	Asp	His 150	Glu	Thr	Ile	Arg	Asn 155	Tyr	Ala	Gln	Val	Phe 160
Asn	Lys	Leu	Ile	Arg 165	Arg	Tyr	Lys	Tyr	Leu 170	Glu	Lys	Ala	Phe	Glu 175	Asp
Glu	Met	Lys	Lys 180	Leu	Leu	Leu	Phe	Leu 185	Lys	Ala	Phe	Ser	Glu 190	Thr	Glu
Gln	Thr	Lys 195	Leu	Ala	Met	Leu	Ser 200	Gly	Ile	Leu	Leu	Gly 205	Asn	Gly	Thr
Leu	Pro 210	Ala	Thr	Ile	Leu	Thr 215	Ser	Leu	Phe	Thr	Asp 220	Ser	Leu	Val	Lys
Glu 225	Gly	Ile	Ala	Ala	Ser 230	Phe	Ala	Val	Lys	Leu 235	Phe	Lys	Ala	Trp	Met 240
Ala	Glu	Lys	Asp	Ala 245	Asn	Ser	Val	Thr	Ser 250	Ser	Leu	Arg	Lys	Ala 255	Asn
Leu	Asp	Lys	Arg 260	Leu	Leu	Glu	Leu	Phe 265	Pro	Val	Asn	Arg	Gln 270	Ser	Val
Asp	His	Phe 275	Ala	Lys	Tyr	Phe	Thr 280	Asp	Ala	Gly	Leu	Lys 285	Glu	Leu	Ser
Asp	Phe 290	Leu	Arg	Val	Gln	Gln 295	Ser	Leu	Gly	Thr	Arg 300	Lys	Glu	Leu	Gln
Lys 305	Glu	Leu	Gln	Glu	Arg 310	Leu	Ser	Gln	Glu	Cys 315	Pro	Ile	Lys	Glu	Val 320
Val	Leu	Tyr	Val	Lys 325	Glu	Glu	Met	Lys	Arg 330	Asn	Asp	Leu	Pro	Glu 335	Thr
Ala	Val	Ile	Gly 340	Leu	Leu	Trp	Thr	Cys 345	Ile	Met	Asn	Ala	Val 350	Glu	Trp
Asn	Lys	Lys 355	Glu	Glu	Leu	Val	Ala 360	Glu	Gln	Ala	Leu	Lys 365	His	Leu	Lys

1189

Gln Tyr Ala Pro Leu Leu Ala Val Phe Ser Ser Gln Gly Gln Ser Glu 370 375 380

Leu Ile Leu Leu Gln Lys Val Gln Glu Tyr Cys Tyr Asp Asn Ile His 385 390 395 400

Phe Met Lys Ala Phe Gln Lys Ile Val Leu Pro Tyr Thr Ile Ser Val 405 410 415

Leu Leu Leu Arg Ser Glu His Gln Leu Xaa Ser Cys Arg Phe Gly Thr 420 425 430

Ser Gly Thr Ser 435

<210> 1175

<211> 366

<212> PRT

<213> Homo sapiens

<400> 1175

Thr Glu Pro Val Gly Tyr Thr Lys Ala Glu Glu Pro Ile Ala Met Arg
1 10 15

Ser Leu Gly Ala Leu Leu Leu Leu Ser Ala Cys Leu Ala Val Ser 20 25 30

Ala Gly Pro Val Pro Thr Pro Pro Asp Asn Ile Gln Val Gln Glu Asn
35 40 45

Phe Asn Ile Ser Arg Ile Tyr Gly Lys Trp Tyr Asn Leu Ala Ile Gly 50 55 60

Ser Thr Cys Pro Trp Leu Lys Lys Ile Met Asp Arg Met Thr Val Ser 65 70 75 80

Thr Leu Val Leu Gly Glu Gly Ala Thr Glu Ala Glu Ile Ser Met Thr
85 90 95

Ser Thr Arg Trp Arg Lys Gly Val Cys Glu Glu Thr Ser Gly Ala Tyr 100 105 110

Glu Lys Thr Asp Thr Asp Gly Lys Phe Leu Tyr His Lys Ser Lys Trp 115 120 125

Asn Ile Thr Met Glu Ser Tyr Val Val His Thr Asn Tyr Asp Glu Tyr 130 135 140

Ala Ile Phe Leu Thr Lys Lys Phe Ser Arg His His Gly Pro Thr Ile

1190

150 155 160 145 Thr Ala Lys Leu Tyr Gly Arg Ala Pro Gln Leu Arg Glu Thr Leu Leu 165 Gln Asp Phe Arg Val Val Ala Gln Gly Val Gly Ile Pro Glu Asp Ser 180 185 Ile Phe Thr Met Ala Asp Arg Gly Glu Cys Val Pro Gly Glu Glu Glu 200 Pro Glu Pro Ile Leu Ile Pro Arg Val Arg Arg Ala Val Leu Pro Gln Glu Glu Glu Gly Ser Gly Gly Gln Leu Val Thr Glu Val Thr Lys Lys Glu Asp Ser Cys Gln Leu Gly Tyr Ser Ala Gly Pro Cys Met Gly 250 245 Met Thr Ser Arg Tyr Phe Tyr Asn Gly Thr Ser Met Ala Cys Glu Thr 260 265 Phe Gln Tyr Gly Gly Cys Met Gly Asn Gly Asn Asn Phe Val Thr Glu 280 285 Lys Glu Cys Leu Gln Thr Cys Arg Thr Val Ala Ala Cys Asn Leu Pro 295 Ile Val Arg Gly Pro Cys Arg Ala Phe Ile Gln Leu Trp Ala Phe Asp 305 310 315 Ala Val Lys Gly Lys Cys Val Leu Phe Pro Tyr Gly Gly Cys Gln Gly 330 325 Asn Gly Asn Lys Phe Tyr Ser Glu Lys Glu Cys Arg Glu Tyr Cys Gly 345 Val Pro Gly Asp Gly Asp Glu Glu Leu Leu Arg Phe Ser Asn 355 360

<210> 1176

<211> 133

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (105)

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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (120)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1176
Met Pro Arg Ser Ser His His Pro Pro Arg Arg His Tyr His His His
                                     10
His Tyr His Gln Pro Pro Pro Ser Pro Cys Pro Ser Pro Pro Leu Thr
                                 25
             20
Ser Pro Ser Pro Leu Ser Trp Ile Leu Trp Thr Cys Trp Pro Ser Thr
                             40
Ala Ala Thr Arg Pro Gly Arg Arg Lys Trp Gly Cys Arg Leu Cys Pro
                         55
Arg His Ser Ser Pro Leu Leu Leu His Leu Asn Leu Leu Ala Trp
                     70
                                         75
Ala Pro Tyr Pro His Pro Ala Thr Thr Arg Gly Asp Arg Lys Gln Lys
                                    90
Lys Arg Asp Gln Asn Lys Ser Ala Xaa Leu Arg Tyr Arg Gln Arg Lys
Gly Ala Gly Gly Val Glu Gly Xaa Gly Lys Gly Lys Leu Xaa Gly Gly
Trp Glu Gly Lys Gly
   130
<210> 1177
<211> 583
<212> PRT
<213> Homo sapiens
<400> 1177
Thr Ala Gln Arg Pro Arg Ser Pro Glu Asn Cys Arg Pro Ser Thr Met
                                    10
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Trp	Leu	Arg	20	Pne	IIe	Leu	Ala	25	Leu	ser	Ala	ser	30	Ala	Tr
Ala	Gly	His 35	Pro	Ser	Ser	Pro	Pro 40	Val	Val	Asp	Thr	Val 45	His	Gly	Lys
Val	Leu 50	Gly	Lys	Phe	Val	Ser 55	Leu	Glu	Gly	Phe	Ala 60	Gln	Pro	Val	Ala
Ile 65	Phe	Leu	Gly	Ile	Pro 70	Phe	Ala	Lys	Pro	Pro 75	Leu	Gly	Pro	Leu	Arq 80
Phe	Thr	Pro	Pro	Gln 85	Pro	Ala	Glu	Pro	Trp 90	Ser	Phe	Val	Lys	Asn 95	Ala
Thr	Ser	Tyr	Pro 100	Pro	Met	Cys	Thr	Gln 105	Asp	Pro	Lys	Ala	Gly 110	Gln	Let
Leu	Ser	Glu 115	Leu	Phe	Thr	Asn	Arg 120	Lys	Glu	Asn	Ile	Pro 125	Leu	Lys	Lev
Ser	Glu 130	Asp	Cys	Leu	Tyr	Leu 135	Asn	Ile	Tyr	Thr	Pro 140	Ala	Asp	Leu	Thi
Lys 145	Lys	Asn	Arg	Leu	Pro 150	Val	Met	Val	Trp	Ile 155	His	Gly	Gly	Gly	Le:
Met	Val	Gly	Ala	Ala 165	Ser	Thr	Tyr	Asp	Gly 170	Leu	Ala	Leu	Ala	Ala 175	His
Glu	Asn	Val	Val 180	Val	Val	Thr	Ile	Gln 185	Tyr	Arg	Leu	Gly	Ile 190	Trp	Gl
Phe	Phe	Ser 195	Thr	Gly	Asp	Glu	His 200	Ser	Arg	Gly	Asn	Trp 205	Gly	His	Leu
Asp	Gln 210	Val	Ala	Ala	Leu	Arg 215	Trp	Val	Gln	Asp	Asn 220	Ile	Ala	Ser	Ph€
Gly 225	Gly	Asn	Pro	Gly	Ser 230	Val	Thr	Ile	Phe	Gly 235	Glu	Ser	Ala	Gly	Gl ₃ 240
Glu	Ser	Val	Ser	Val 245	Leu	Val	Leu	Ser	Pro 250	Leu	Ala	Lys	Asn	Leu 255	Phe
His	Arg	Ala	Ile 260	Ser	Glu	Ser	Gly	Val 265	Ala	Leu	Thr	Ser	Val 270	Leu	Va]
Lys	Lys	Gly 275	Asp	Val	Lys	Pro	Leu 280		Glu	Gln		Ala 285	Ile	Thr	Ala

Gly	Cys 290	Lys	Thr	Thr	Thr	Ser 295	Ala	Val	Met	Val	His 300	Cys	Leu	Arg	Gln
Lys 305	Thr	Glu	Glu	Glu	Leu 310	Leu	Glu	Thr	Thr	Leu 315	Lys	Met	Lys	Phe	Leu 320
Ser	Leu	Asp	Leu	Gln 325	Gly	Asp	Pro	Arg	Glu 330	Ser	Gln	Pro	Leu	Leu 335	Gly
Thr	Val	Ile	Asp 340	Gly	Met	Leu	Leu	Leu 345	Lys	Thr	Pro	Glu	Glu 350	Leu	Gln
Ala	Glu	Arg 355	Asn	Phe	His	Thr	Val 360	Pro	Tyr	Met	Val	Gly 365	Ile	Asn	Lys
Gln	Glu 370	Phe	Gly	Trp	Leu	Ile 375	Pro	Met	Gln	Leu	Met 380	Ser	туг	Pro	Leu
Ser 385	Glu	Gly	Gln	Leu	Asp 390	Gln	Lys	Thr	Ala	Met 395	Ser	Leu	Leu	Trp	Lys 400
Ser	Tyr	Pro	Leu	Val 405	Cys	Ile	Ala	Lys	Glu 410	Leu	Ile	Pro	Glu	Ala 415	Thr
Glu	Lys	Tyr	Leu 420	Gly	Gly	Thr	Asp	Asp 425	Thr	Val	Lys	Lys	Lys 430	Asp	Leu
Phe	Leu	Asp 435	Leu	Ile	Ala	Asp	Val 440	Met	Phe	Gly	Val	Pro 445	Ser	Val	Ile
Val	Ala 450	Arg	Asn	His	Arg	Asp 455	Ala	Gly	Ala	Pro	Thr 460	Tyr	Met	Tyr	Glu
Phe 465	Gln	Tyr	Arg	Pro	Ser 470	Phe	Ser	Ser	Asp	Met 475	Lys	Pro	Lys	Thr	Val 480
Ile	Gly	Asp	His	Gly 485	Asp	Glu	Leu	Phe	Ser 490	Val	Phe	Gly	Ala	Pro 495	Phe
Leu	Lys	Glu	Gly 500	Ala	Ser	Glu	Glu	Glu 505	Ile	Arg	Leu	Ser	Lys 510	Met	Val
Met	Lys	Phe 515	Trp	Ala	Asn	Phe	Ala 520	Arg	Asn	Gly	Asn	Pro 525	Asn	Gly	Glu
Gly	Leu 530	Pro	His	Trp	Pro	Glu 535	Tyr	Asn	Gln	Lys	Glu 540	Gly	Tyr	Leu	Gln
Ile 545	Gly	Ala	Asn	Thr	Gln 550	Ala	Ala	Gln	Lys	Leu 555	Lys	Asp	Lys	Glu	Val 560

1194

Ala Phe Trp Thr Asn Leu Phe Ala Lys Lys Ala Val Glu Lys Pro Pro 565 570 575

Gln Thr Glu His Ile Glu Leu 580

<210> 1178

<211> 98

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1178

Pro Gly Arg Xaa Gln Leu Arg Ala Lys Phe Ser Cys Pro Pro Ala Asp 1 5 10 15

Arg Val Asn Val Thr Val Arg Pro Gly Leu Ala Met Ala Leu Ser Gly 20 25 30

Ser Thr Glu Pro Cys Ala Gln Leu Ser Ile Ser Ser Ile Gly Val Val 35 40 45

Gly Thr Ala Glu Asp Asn Arg Ser His Ser Ala His Phe Phe Glu Phe 50 55 60

Leu Thr Lys Glu Leu Ala Leu Gly Gln Asp Arg Ile Leu Ile Arg Phe 65 70 75 80

Phe Pro Leu Glu Ser Trp Gln Ile Gly Lys Ile Gly Thr Val Met Thr 85 90 95

Phe Leu

<210> 1179

<211> 127

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

PCT/US00/05882

<220> <221> SITE <222> (50) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (67) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1179 Phe Arg Pro Ala Val Ser Xaa Gly Ser Leu Cys Leu Pro Ala Arg Thr Ala His Ser Pro Ala Ser Ser Ala Ala Cys Arg Thr Met Ala Gln Gly Gln Arg Lys Phe Gln Ala His Lys Pro Ala Lys Ser Lys Thr Ala Ala 40 35 Ala Xaa Ser Glu Lys Asn Arg Gly Pro Arg Lys Gly Gly Arg Val Ile 55 Ala Pro Xaa Lys Ala Arg Val Val Gln Gln Lys Leu Lys Lys Asn 70 75 Leu Glu Val Gly Ile Arg Lys Lys Ile Glu His Asp Val Val Met Lys Ala Ser Ser Leu Pro Lys Lys Leu Ala Leu Leu Lys Ala Pro Ala 100 105 Lys Lys Lys Gly Ala Ala Ala Thr Ser Ser Lys Thr Pro Ser 115 120 <210> 1180 <211> 94 <212> PRT <213> Homo sapiens <400> 1180 Ser Ser Tyr Arg Ser Lys Ala Tyr Thr His Thr Lys Ile Thr Val Pro Arg Glu Arg Val Cys Val Ser Val Arg Val Ser Val Cys Ala Arg Ala

25

Arg Ser Trp Pro Asn Val Arg Thr Leu His Lys Gly Gly Arg Ser Ser

1196

35 40 45

Tyr Arg Leu Phe Asn Val Arg Glu Thr Ile Phe Leu Leu Phe Gln Leu 50 55 60

Tyr Gln Ile Leu Val Pro Gln His Arg Asn Asp Ser Glu Ser Gln Thr
65 70 75 80

Lys Cys Ile Ile Cys Ser Ile Leu Ile Leu Leu His Ser 85 90

<210> 1181

<211> 353

<212> PRT

<213> Homo sapiens

<400> 1181

Gly Ser Leu Asp Leu Trp Arg Gly Ala Glu Leu Ser Pro Gly His Ser 1 5 10 15

Thr Leu Phe Thr Leu Cys Ala Cys Ala Lys Gly Ala Met Ala Ala Ser 20 25 30

Cys Val Leu Leu His Thr Gly Gln Lys Met Pro Leu Ile Gly Leu Gly 35 40 45

Thr Trp Lys Ser Glu Pro Gly Gln Val Lys Ala Ala Val Lys Tyr Ala
50 55 60

Leu Ser Val Gly Tyr Arg His Ile Asp Cys Ala Ala Ile Tyr Gly Asn
65 70 75 80

Glu Pro Glu Ile Gly Glu Ala Leu Lys Glu Asp Val Gly Pro Gly Lys
85 90 95

Ala Val Pro Arg Glu Glu Leu Phe Val Thr Ser Lys Leu Trp Asn Thr 100 105 110

Lys His His Pro Glu Asp Val Glu Pro Ala Leu Arg Lys Thr Leu Ala 115 120 125

Asp Leu Gln Leu Glu Tyr Leu Asp Leu Tyr Leu Met His Trp Pro Tyr 130 135 140

Ala Phe Glu Arg Gly Asp Asn Pro Phe Pro Lys Asn Ala Asp Gly Thr 145 150 155 160

Ile Cys Tyr Asp Ser Thr His Tyr Lys Glu Thr Trp Lys Ala Leu Glu 165 170 175

1197

Ala Leu Val Ala Lys Gly Leu Val Gln Ala Leu Gly Leu Ser Asn Phe 185 Asn Ser Arg Gln Ile Asp Asp Ile Leu Ser Val Ala Ser Val Arg Pro 200 195 Ala Val Leu Gln Val Glu Cys His Pro Tyr Leu Ala Gln Asn Glu Leu 215 Ile Ala His Cys Gln Ala Arg Gly Leu Glu Val Thr Ala Tyr Ser Pro 230 235 Leu Gly Ser Ser Asp Arg Ala Trp Arg Asp Pro Asp Glu Pro Val Leu 245 Leu Glu Glu Pro Val Val Leu Ala Leu Ala Glu Lys Tyr Gly Arg Ser Pro Ala Gln Ile Leu Leu Arg Trp Gln Val Gln Arg Lys Val Ile Cys 280 Ile Pro Lys Ser Ile Thr Pro Ser Arg Ile Leu Gln Asn Ile Lys Val 290 295 Phe Asp Phe Thr Phe Ser Pro Glu Glu Met Lys Gln Leu Asn Ala Leu 305 310 315 Asn Lys Asn Trp Arg Tyr Ile Val Pro Met Leu Thr Val Asp Gly Lys 330 325 Arg Val Pro Arg Asp Ala Gly His Pro Leu Tyr Pro Phe Asn Asp Pro 340 345

Tyr

<210> 1182

<211> 174

<212> PRT

<213> Homo sapiens

<400> 1182

Ala Arg Asp Ser Leu Gln Leu Ser Met Ala Gln Thr Ser Ser Tyr Phe 1 5 10 15

Met Leu Ile Ser Cys Leu Met Phe Leu Ser Gln Ser Gln Gly Gln Glu 20 25 30

1198

Ala Gln Thr Glu Leu Pro Gln Ala Arg Ile Ser Cys Pro Glu Gly Thr 40 35 Asn Ala Tyr Arg Ser Tyr Cys Tyr Tyr Phe Asn Glu Asp Arg Glu Thr 55 Trp Val Asp Ala Asp Leu Tyr Cys Gln Asn Met Asn Ser Gly Asn Leu 65 70 75 Val Ser Val Leu Thr Gln Ala Glu Gly Ala Phe Val Ala Ser Leu Ile Lys Glu Ser Gly Thr Asp Asp Phe Asn Val Trp Ile Gly Leu His Asp 105 Pro Lys Lys Asn Arg Arg Trp His Trp Ser Ser Gly Ser Leu Val Ser 125 115 120 Tyr Lys Ser Trp Gly Ile Gly Ala Pro Ser Ser Val Asn Pro Gly Tyr 135 Cys Val Ser Leu Thr Ser Ser Thr Gly Phe Gln Lys Trp Lys Asp Val 155 Pro Cys Glu Asp Lys Phe Ser Phe Val Cys Lys Phe Lys Asn

170

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<210> 1183
<211> 342
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (169)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (171)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (187)
<223> Xaa equals any of the naturally occurring L-amino acids
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165

<220> <221> SITE

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<22	3> X	aa e	qual	s an	y of	the	nati	ıral	ly o	ccur	ring	L-ai	mino	acio	ds
<220	0>														
	1> S														
	2> (•	-		_							•			
<22	3> X	aa e	quals	s an	y of	the	nati	ıral.	Ly o	ccur	ring	L-ai	mino	acı	as
	0> 1														
Ser 1	Ile	Phe	Ser	Tyr 5	Ile	Arg	Leu	Glu	Leu 10	Pro	Ser	Met	Trp	Leu 15	Leu
1		1			-1		•	-1-	0	0	77- 1	01	21	a 1	n 1 -
Val	ser	Val	20	Leu	ше	ser	Arg	25	ser	ser	Val	GIY	30	GIU	АІА
mb.~	Dho	C	7 ~ ~	Dho	Dro	T	т10	Nan	uic	C1.	Ile	Tou	Tur	Acn	Glu
1111	FILE	35	Asp	FILE	PIO	пур	40	ASII	1113	GLY	116	45	± y ±	лэр	Olu
C1.,	T	M	T	Dro	Dho	Cor	Cln	17a l	Pro	Thr	Gly	Glu	17a l	Dhe	Фил
Giu	50	ığı	пуз	FIO	FIIC	55	GIII	Val	110	1111	60	Giu	Vai	1110	- 7 -
	50														
Tyr	Ser	Cys	Glu	Tyr	Asn	Phe	Val	Ser	Pro	Ser	Lys	Ser	Phe	Trp	Thr
65		_			70					75					80
Arg	Ile	Thr	Cys	Thr	Glu	Glu	Gly	Trp		Pro	Thr	Pro	Lys		Leu
				85					90					95	
7. ~~~	T 011	C···	Dho	Dho	Dro	Dho	1701	~1.v	7 cn	C1 v	His	Sor	Gl.	Sor	Ser
Arg	Leu	Cys	100	Pne	PIO	Pne	vaı	105	ASII	GIY	птэ	ser	110	ser	SeT
			100					103					110		
Gly	Gln	Thr	His	Leu	Glu	Gly	Asp	Thr	Val	Gln	Ile	Ile	Cys	Asn	Thr
		115				_	120					125			
Gly		Arg	Leu	Gln	Asn		Glu	Asn	Asn	Ile	Ser	Cys	Val	Glu	Arg
	130					135					140				
Clv.	m~n	Sor	Thr	Bro	Bro	Tvc	Cvc	Ara	Sar	Thr	Asp	Th-	Ser	Cve	Val
145	пр	ser	TIII	PIO	150	ьуѕ	Cys	ALG	Ser	155	тэр	1111	Ser	Суз	160
143					100					100					
Asn	Pro	Pro	Thr	Val	Gln	Asn	Ala	Xaa	Ile	Xaa	Ser	Arg	Gln	Met	Ser
			•	165					170					175	
Lys	Tyr	Pro	Ser	Gly	Glu	Arg	Val	Arg	Tyr	Xaa	Cys	Arg	Ser	Pro	Tyr
			180					185					190		
6 3		D 1	a 1		~ 3	~ 1	*** *		O *	T	7	G2 =:	7		m1
GIU	met	Phe 195	стХ	Asp	GIU	GIU	Val 200	met	cys	ьeu	Asn	205	ASN	rrp	Inr
		193					200					200			
Glu	Pro	Pro	Gln	Cys	Lys	Asp	Ser	Thr	Gly	Lys	Cys	Gly	Pro	Pro	Pro
	210			_	_	215			-	_	220	-			

1200

Pro Ile Asp Asn Gly Asp Ile Thr Ser Phe Pro Leu Ser Val Tyr Ala 230 235 Pro Ala Ser Ser Val Glu Tyr Gln Cys Gln Asn Leu Tyr Gln Leu Glu 250 245 Gly Asn Lys Arg Ile Thr Cys Arg Asn Gly Gln Trp Ser Glu Pro Pro 260 265 Lys Cys Leu His Pro Cys Val Ile Ser Arg Glu Ile Met Glu Asn Tyr 275 280 Asn Ile Ala Leu Arg Trp Thr Ala Lys Gln Lys Leu Tyr Xaa Arg Thr 295 Gly Glu Ser Xaa Glu Phe Val Cys Lys Arg Gly Tyr Arg Leu Ser Ser 305 315 310 Arg Ser His Thr Leu Arg Thr Thr Cys Trp Asp Gly Lys Leu Glu Tyr 325 330 Pro Thr Cys Ala Lys Arg 340 <210> 1184 <211> 198 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (161) <223> Xaa equals any of the naturally occurring L-amino acids Pro Xaa Arg Pro Arg Gly Ala Ala Ala Ala Ala Ala Ala Gly Ala Ala Met Pro Lys Gly Gly Arg Lys Gly Gly His Lys Gly Arg Ala Arg Gln Tyr Thr Ser Pro Glu Glu Ile Asp Ala Gln Leu Gln Ala Glu Lys 40

Gln Lys Ala Arg Glu Glu Glu Glu Glu Lys Glu Gly Gly Asp Gly Ala
50 55 60

Ala Gly Asp Pro Lys Lys Glu Lys Lys Ser Leu Asp Ser Asp Glu Ser 65 70 75 80

Glu Asp Glu Glu Asp Asp Tyr Gln Gln Lys Arg Lys Gly Val Glu Gly
85 90 95

Leu Ile Asp Ile Glu Asn Pro Asn Arg Val Ala Gln Thr Thr Lys Lys
100 105 110

Val Thr Gln Leu Asp Leu Asp Gly Pro Lys Glu Leu Ser Arg Arg Glu 115 120 125

Arg Glu Glu Ile Glu Lys Gln Lys Ala Lys Glu Arg Tyr Met Lys Met 130 135 140

His Leu Ala Gly Lys Thr Glu Gln Ala Lys Ala Asp Leu Ala Arg Leu 145 150 155 160

Xaa Ile Ile Arg Lys Gln Arg Glu Glu Ala Ala Arg Lys Lys Glu Glu 165 170 175

Glu Arg Lys Ala Lys Asp Asp Ala Thr Leu Ser Gly Lys Arg Met Gln
180 185 190

Ser Leu Ser Leu Asn Lys 195

<210> 1185

<211> 210

<212> PRT

<213> Homo sapiens

<400> 1185

Ala His Ala Ser Ala His Ala Ser Gly Met Asp Leu Ser Leu Leu Trp
1 5 10 15

Val Leu Leu Pro Leu Val Thr Met Ala Trp Gly Gln Tyr Gly Asp Tyr
20 25 30

Gly Tyr Pro Tyr Gln Gln Tyr His Asp Tyr Ser Asp Asp Gly Trp Val
35 40 45

Asn Leu Asn Arg Gln Gly Phe Ser Tyr Gln Cys Pro Gln Gly Gln Val 50 60

Ile Val Ala Val Arg Ser Ile Phe Ser Lys Lys Glu Gly Ser Asp Arg

1202

65 70 75 80 Gln Trp Asn Tyr Ala Cys Met Pro Thr Pro Gln Ser Leu Gly Glu Pro 85 Thr Glu Cys Trp Trp Glu Glu Ile Asn Arg Ala Gly Met Glu Trp Tyr 105 Gln Thr Cys Ser Asn Asn Gly Leu Val Ala Gly Phe Gln Ser Arg Tyr 120 Phe Glu Ser Val Leu Asp Arg Glu Trp Gln Phe Tyr Cys Cys Arg Tyr 135 Ser Lys Arg Cys Pro Tyr Ser Cys Trp Leu Thr Thr Glu Tyr Pro Gly 150 155 His Tyr Gly Glu Glu Met Asp Met Ile Ser Tyr Asn Tyr Asp Tyr Tyr 170 Ile Arg Gly Ala Thr Thr Phe Ser Ala Val Glu Arg Asp Arg Gln 185 180 Trp Lys Phe Ile Met Cys Arg Met Thr Glu Tyr Asp Cys Glu Phe Ala 200 205 Asn Val 210 <210> 1186 <211> 141 <212> PRT <213> Homo sapiens <400> 1186 Arg Ala Ile Tyr Phe Leu Arg Val His Arg Leu Trp Ser Ser Ile Ser 5 10 Leu Leu Phe Phe Pro Ser Ala Lys Met Ala Leu Glu Thr Val Pro Lys Asp Leu Arg His Leu Arg Ala Cys Leu Leu Cys Ser Leu Val Lys Thr 40 Ile Asp Gln Phe Glu Tyr Asp Gly Cys Asp Asn Cys Asp Ala Tyr Leu 55 Gln Met Lys Gly Asn Arg Glu Met Val Tyr Asp Cys Thr Ser Ser Ser

70

1203

Phe Asp Gly Ile Ile Ala Met Met Ser Pro Glu Asp Ser Trp Val Ser

85 90 95

Lus Trp Clo Arg Val Ser Asp Phe Lus Pro Glu Val Tur Ala Val Ser

Lys Trp Gln Arg Val Ser Asn Phe Lys Pro Gly Val Tyr Ala Val Ser 100 105 110

Val Thr Gly Arg Leu Pro Gln Gly Ile Val Arg Glu Leu Lys Ser Arg 115 120 125

Gly Val Ala Tyr Lys Ser Arg Asp Thr Ala Ile Lys Thr 130 135 140

<210> 1187

<211> 76

<212> PRT

<213> Homo sapiens

<220>

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<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (66)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1187

Leu Leu Gly Ser Cys Leu Gln Glu Ala Met Thr Leu Asn Ser Glu Pro

1 5 10 15

Tyr Ser Val Leu Thr Ser Gly Ser His Val Phe Leu Cys Gln Val Ile 20 25 30

Lys Tyr Leu Val Leu Val Phe Cys Leu Xaa Pro Lys Leu Pro Leu Trp
35 40 45

Val His Arg Arg Leu Gly Ser Ile Val Arg Met Ala Ile Arg Glu Tyr 50 55 60

Lys Xaa Gly Phe Ser Lys Gly Leu Gly Xaa Asp Ser 65 70 75

1204

<210> 1188 <211> 516 <212> PRT <213> Homo sapiens <400> 1188 Ile Arg Ile Ala Ala Leu Asp Asp Phe Arg Thr Ser Leu Thr Met Ser 1.0 Ser Thr Arg Ser Gln Asn Pro His Gly Leu Lys Gln Ile Gly Leu Asp 20 Gln Ile Trp Asp Asp Leu Arg Ala Gly Ile Gln Gln Val Tyr Thr Arg Gln Ser Met Ala Lys Ser Arg Tyr Met Glu Leu Tyr Thr His Val Tyr 55 Asn Tyr Cys Thr Ser Val His Gln Ser Asn Gln Ala Arg Gly Ala Gly 70 Val Pro Pro Ser Lys Ser Lys Gly Gln Thr Pro Gly Gly Ala Gln 90 Phe Val Gly Leu Glu Leu Tyr Lys Arg Leu Lys Glu Phe Leu Lys Asn 105 Tyr Leu Thr Asn Leu Leu Lys Asp Gly Glu Asp Leu Met Asp Glu Ser 115 Val Leu Lys Phe Tyr Thr Gln Gln Trp Glu Asp Tyr Arg Phe Ser Ser Lys Val Leu Asn Gly Ile Cys Ala Tyr Leu Asn Arg His Trp Val Arg 150 155 Arg Glu Cys Asp Glu Gly Arg Lys Gly Ile Tyr Glu Ile Tyr Ser Leu 165 170 Ala Leu Val Thr Trp Arg Asp Cys Leu Phe Arg Pro Leu Asn Lys Gln 185 Val Thr Asn Ala Val Leu Lys Leu Ile Glu Lys Glu Arg Asn Gly Glu 200 Thr Ile Asn Thr Arg Leu Ile Ser Gly Val Val Gln Ser Tyr Val Glu 210 215 220

Leu Gly Leu Asn Glu Asp Asp Ala Phe Ala Lys Gly Pro Thr Leu Thr

Val Tyr Lys Glu Ser Phe Glu Ser Gln Phe Leu Ala Asp Thr Glu Arg Phe Tyr Thr Arg Glu Ser Thr Glu Phe Leu Gln Gln Asn Pro Val Thr Glu Tyr Met Lys Lys Ala Glu Ala Arg Leu Leu Glu Glu Gln Arg Arg Val Gln Val Tyr Leu His Glu Ser Thr Gln Asp Glu Leu Ala Arg Lys Cys Glu Gln Val Leu Ile Glu Lys His Leu Glu Ile Phe His Thr Glu Phe Gln Asn Leu Leu Asp Ala Asp Lys Asn Glu Asp Leu Gly Arg Met Tyr Asn Leu Val Ser Arg Ile Gln Asp Gly Leu Gly Glu Leu Lys Lys Leu Leu Glu Thr His Ile His Asn Gln Gly Leu Ala Ala Ile Glu Lys Cys Gly Glu Ala Ala Leu Asn Asp Pro Lys Met Tyr Val Gln Thr Val Leu Asp Val His Lys Lys Tyr Asn Ala Leu Val Met Ser Ala Phe Asn Asn Asp Ala Gly Phe Val Ala Ala Leu Asp Lys Ala Cys Gly Arg Phe Ile Asn Asn Asn Ala Val Thr Lys Met Ala Gln Ser Ser Lys Ser Pro Glu Leu Leu Ala Arg Tyr Cys Asp Ser Leu Leu Lys Lys Ser Ser Lys Asn Pro Glu Glu Ala Glu Leu Glu Asp Thr Leu Asn Gln Val Met Val Val Phe Lys Tyr Ile Glu Asp Lys Asp Val Phe Gln Lys Phe Tyr Ala Lys Met Leu Ala Lys Arg Leu Val His Gln Asn Ser Ala Ser Asp Asp Ala Glu Ala Ser Met Ile Ser Lys Leu Lys Gln Ala Cys Gly Phe

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505
                                                    510
            500
Glu Tyr Thr Ser
        515
<210> 1189
<211> 287
<212> PRT
<213> Homo sapiens
<220>
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<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
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<22	3> X	aa e	qual	s any	y of	the	nati	ural	ly o	ccur	ring	L-ai	mino	acio	ds
<40	0> 1	189													
Met	Ser	Tyr	Cys	Asp	Glu	Ser	Arg	Leu	Ser	Asn	Leu	Leu	Arg	Arg	Ile
1		•	-	5					10					15	
Thr	Arg	Glu	Xaa 20	Asp	Arg	Asp	Xaa	Arg 25	Leu	Xaa	Thr	Val	Lys 30	Gln	Leu
Lys	Glu	Phe 35	Ile	Gln	Gln	Pro	Glu 40	Asn	Lys	Leu	Val	Leu 45	Val	Lys	Gln
Leu	Asp 50	Ile	Leu	Ala	Ala	Xaa 55	His	Asp	Val	Leu	Asn 60	Glu	Ser	Ser	Lys
Leu 65	Leu	Gln	Glu	Leu	Arg 70	Gln	Glu	Gly	Ala	Cys 75	Cys	Leu	Gly	Leu	Leu 80
Cys	Ala	Ser	Leu	Ser 85	Tyr	Glu	Ala	Glu	Lys 90	Ile	Phe	Lys	Trp	Ile 95	Phe
Ser	Lys	Phe	Ser 100	Ser	Ser	Ala	Lys	Asp 105	Glu	Val	Lys	Leu	Leu 110	Tyr	Leu
Cys	Ala	Thr 115	Tyr	Lys	Ala	Leu	Glu 120	Thr	Val	Gly	Glu	Lys 125	Lys	Ala	Phe
Ser	Ser 130	Val	Met	Gln	Leu	Val 135	Met	Thr	Ser	Leu	Gln 140	Ser	Ile	Leu	Glu
Asn 145	Val	Asp	Thr	Pro	Glu 150	Leu	Leu	Cys	Lys	Cys 155	Val	Lys	Cys	Ile	Leu 160
Leu	Val	Ala	Arg	Cys 165	Tyr	Pro	His	Ile	Phe 170	Ser	Xaa	Asn	Phe	Arg 175	Asp
Thr	Val	Asp	Ile 180	Leu	Val	Gly	Trp	His 185	Arg	Asp	His	Thr	Gln 190	Lys	Pro
Ser	Leu	Thr 195	Gln	Gln	Val	Ser	Gly 200	Trp	Leu	Gln	ser	Leu 205	Glu	Pro	Phe

1208

Trp Val Ala Asp Leu Ala Phe Pro Thr Thr Leu Leu Gly Gln Phe Leu 210 215 220

Glu Asp Met Glu Ala Tyr Ala Glu Asp Leu Ser His Val Ala Ser Gly 225 230 235 240

Glu Ser Val Asp Glu Asp Val Pro Pro Pro Ser Val Ser Xaa Pro Lys 245 250 255

Leu Ala Ala Leu Leu Arg Val Phe Ser Thr Val Val Arg Ser Xaa Gly
260 265 270

Glu Xaa Xaa Ser Pro Ile Arg Xaa Leu Gln Leu Leu Arg His Thr \$275\$ \$280\$ \$285\$

<210> 1190

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1190

Arg Pro Pro Ser Arg Trp Ser Trp Trp Gln Gly Lys Pro Thr Gly Gly
1 5 10 15

Val Cys Val Ala Ala Ala Arg Ser Ser Pro Ser Val Thr Ala Pro Thr 20 25 30

Ser Ser Asn Ala Leu Ala Tyr Leu His Ser Ser Ser Arg Pro Lys Arg 35 40 45

Pro Ala Trp Trp His Ser Val Pro Ala Arg Pro Leu Arg Gly Pro Arg 50 55 60

Thr Ala Met Ala Pro Thr Gly Val Ser Ala Cys Arg Arg Gln Lys Trp 65 70 75 80

Ala Pro His Ser Glu Gly Ala Ala Ala Val Gln Pro Gln Val Ala Leu 85 90 95

Ala Pro Gly Leu 100

<210> 1191

<211> 115

<212> PRT

<213> Homo sapiens

1209

<400> 1191 Asn Asp Val Ile His Gln Tyr Val Tyr Met Tyr Phe Tyr Ile Asp Leu 10 Glu Asn Thr Ala Lys Thr Phe Met Thr Ser Cys Ile Thr Ala Phe Val 25 20 Tyr Ile Phe Leu Thr Val Ile Ile Pro Thr Gly Thr Leu Thr Val Ala 40 Leu Leu Asn Val Gln Asn Leu Tyr Phe Arg Asn Asn Lys Lys Lys Asp Thr Tyr Met Phe Pro Lys Gln Trp Cys Gly Glu Cys Val Arg Lys Thr 70 Asn Leu Ile Gly Ser Thr Asn Thr Lys Cys Ile Thr Asn Ala Pro Val 85 90 His Val Phe Val Leu Lys Arg Val Asn Glu Asp Leu Tyr Ile Ser Ile 105 110 Asn Asp Ile 115 <210> 1192 <211> 415 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (13) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1192 Arg Ile Pro Pro Glu Ser Leu Ala Arg Glu Xaa Arg Xaa Thr Lys Ser 10 Phe Ser Asn Pro Arg Pro Asp Arg Gly Thr Trp Ser Leu Ser Glu 25 Lys Phe Asn Leu Arg Asp Lys Met Gln Trp Thr Ser Leu Leu Leu Leu

40

Ala	Gly 50	Leu	Phe	Ser	Leu	Ser 55	Gln	Ala	Gln	Tyr	Glu 60	Asp	Asp	Pro	His
Trp 65	Trp	Phe	His	Tyr	Leu 70	Arg	Ser	Gln	Gln	Ser 75	Thr	Tyr	Tyr	Asp	Pro 80
туг	Asp	Pro	Tyr	Pro 85	Tyr	Glu	Thr	Tyr	Glu 90	Pro	Tyr	Pro	Tyr	Gly 95	Val
Asp	Glu	Gly	Pro 100	Ala	Tyr	Thr	Tyr	Gly 105	Ser	Pro	Ser	Pro	Pro 110	Asp	Pro
Arg	Asp	Cys 115	Pro	Gln	Glu	Cys	Asp 120	Cys	Pro	Pro	Asn	Phe 125	Pro	Thr	Ala
Met	Tyr 130	Cys	Asp	Asn	Arg	Asn 135	Leu	Lys	Tyr	Leu	Pro 140	Phe	Val	Pro	Ser
Arg 145	Met	Lys	Tyr	Val	Tyr 150	Phe	Gln	Asn	Asn	Gln 155	Ile	Thr	Ser	Ile	Gln 160
Glu	Gly	Val	Phe	Asp 165	Asn	Ala	Thr	Gly	Leu 170	Leu	Trp	Ile	Ala	Leu 175	His
Gly	Asn	Gln	Ile 180	Thr	Ser	Asp	Lys	Val 185	Gly	Arg	Lys	Val	Phe 190	Ser	Lys
Leu	Arg	His 195	Leu	Glu	Arg	Leu	Tyr 200	Leu	Asp	His	Asn	Asn 205	Leu	Thr	Arg
Met	Pro 210	Gly	Pro	Leu	Pro	Arg 215	Ser	Leu	Arg	Glu	Leu 220	His	Leu	Asp	His
Asn 225	Gln	Ile	Ser	Arg	Val 230	Pro	Asn	Asn	Ala	Leu 235	Glu	Gly	Leu	Glu	Asn 240
Leu	Thr	Ala	Leu	Tyr 245	Leu	Gln	His	Asn	Glu 250	Ile	Gln	Glu	Val	Gly 255	Ser
Ser	Met	Arg	Gly 260	Leu	Arg	Ser	Leu	Ile 265	Leu	Leu	Asp	Leu	Ser 270	Tyr	Asn
His	Leu	Arg 275	Lys	Val	Pro	Asp	Gly 280	Leu	Pro	Ser	Ala	Leu 285	Glu	Gln	Leu
Tyr	Met 290	Glu	His	Asn	Asn	Val 295	Tyr	Thr	Val	Pro	Asp 300	Ser	Tyr	Phe	Arg
Gly 305	Ala	Pro	Lys	Leu	Leu 310	Tyr	Val	Arg	Leu	Ser 315	His	Asn	Ser	Leu	Thr 320

1211

Asn Asn Gly Leu Ala Ser Asn Thr Phe Asn Ser Ser Ser Leu Leu Glu 330 Leu Asp Leu Ser Tyr Asn Gln Leu Gln Lys Ile Pro Pro Val Asn Thr 340 345 Asn Leu Glu Asn Leu Tyr Leu Gln Gly Asn Arg Ile Asn Glu Phe Ser 355 360 Ile Ser Ser Phe Cys Thr Val Val Asp Val Val Asn Phe Ser Lys Leu 375 Gln Val Leu Arg Leu Asp Gly Asn Glu Ile Lys Arg Ser Ala Met Pro 390 Ala Asp Ala Pro Leu Cys Leu Arg Leu Ala Ser Leu Ile Glu Ile 405 410 <210> 1193 <211> 620 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (375) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (501) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (532) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (546) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1193 Ser Ala Val Thr Ala Phe Ser Glu Gly Ser Val Ile Ala Tyr Tyr Trp 10

Ser Glu Phe Ser Ile Pro Gln His Leu Val Glu Glu Ala Glu Arg Val

Met Ala Glu Glu Arg Val Val Met Leu Pro Pro Arg Ala Arg Ser Leu Lys Ser Phe Val Val Thr Ser Val Val Ala Phe Pro Thr Asp Ser Lys Thr Val Gln Arg Thr Gln Asp Asn Ser Cys Ser Phe Gly Leu His Ala Arg Gly Val Glu Leu Met Arg Phe Thr Thr Pro Gly Phe Pro Asp Ser Pro Tyr Pro Ala His Ala Arg Cys Gln Trp Ala Leu Arg Gly Asp Ala Asp Ser Val Leu Ser Leu Thr Phe Arg Ser Phe Asp Leu Ala Ser Cys Asp Glu Arg Gly Ser Asp Leu Val Thr Val Tyr Asn Thr Leu Ser Pro Met Glu Pro His Ala Leu Val Gln Leu Cys Gly Thr Tyr Pro Pro Ser Tyr Asn Leu Thr Phe His Ser Ser Gln Asn Val Leu Leu Ile Thr Leu Ile Thr Asn Thr Glu Arg Arg His Pro Gly Phe Glu Ala Thr Phe Phe Gln Leu Pro Arg Met Ser Ser Cys Gly Gly Arg Leu Arg Lys Ala Gln Gly Thr Phe Asn Ser Pro Tyr Tyr Pro Gly His Tyr Pro Pro Asn Ile Asp Cys Thr Trp Asn Ile Glu Val Pro Asn Asn Gln His Val Lys Val Arg Phe Lys Phe Phe Tyr Leu Leu Glu Pro Gly Val Pro Ala Gly Thr Cys Pro Lys Asp Tyr Val Glu Ile Asn Gly Glu Lys Tyr Cys Gly Glu Arg Ser Gln Phe Val Val Thr Ser Asn Ser Asn Lys Ile Thr Val Arg Phe His Ser Asp Gln Ser Tyr Thr Asp Thr Gly Phe Leu Ala Glu Tyr

Leu Ser Tyr Asp Ser Ser Asp Pro Cys Pro Gly Gln Phe Thr Cys Arg Thr Gly Arg Cys Ile Arg Lys Glu Leu Arg Cys Asp Gly Trp Ala Asp Cys Thr Asp His Ser Asp Glu Leu Asn Cys Ser Cys Asp Ala Gly His Gln Phe Thr Cys Lys Asn Lys Phe Cys Lys Pro Leu Phe Trp Val Cys Asp Ser Val Asn Asp Cys Xaa Asp Asn Ser Asp Glu Gln Gly Cys Ser Cys Pro Ala Gln Thr Phe Arg Cys Ser Asn Gly Lys Cys Leu Ser Lys Ser Gln Gln Cys Asn Gly Lys Asp Asp Cys Gly Asp Gly Ser Asp Glu Ala Ser Cys Pro Lys Val Asn Val Val Thr Cys Thr Lys His Thr Tyr Arg Cys Leu Asn Gly Leu Cys Leu Ser Lys Gly Asn Pro Glu Cys Asp Gly Lys Glu Asp Cys Ser Asp Gly Ser Asp Glu Lys Asp Cys Asp Cys Gly Leu Arg Ser Phe Thr Arg Gln Ala Arg Val Val Gly Gly Thr Asp Ala Asp Glu Gly Glu Trp Pro Trp Gln Val Ser Leu His Ala Leu Gly Gln Gly Thr Ser Xaa Gly Ala Ser Leu Ile Ser Pro Asn Trp Leu Val Ser Ala Ala His Cys Tyr Ile Asp Asp Arg Gly Phe Arg Tyr Ser Asp Pro Thr Gln Xaa Thr Ala Phe Leu Gly Leu His Asp Gln Ser Gln Arg Ser Xaa Leu Gly Cys Arg Ser Ala Gly Ser Ser Ala Ser Ser Pro Thr Pro Ser Ser Met Thr Ser Pro Ser Thr Met Thr Ser Arg Cys Trp Ser

1214

Trp Arg Asn Arg Gln Ser Thr Ala Pro Trp Cys Gly Pro Ser Ala Cys 580 585 590

Arg Thr Pro Pro Met Ser Ser Leu Pro Ala Arg Pro Ser Gly Ser Arg 595 600 605

Ala Gly Asp Thr Pro Ser Met Glu Ala Leu Ala Arg 610 615 620

<210> 1194

<211> 51

<212> PRT

<213> Homo sapiens

<400> 1194

Arg Thr Leu Cys His Leu Thr Thr Leu Asp Glu Leu Ser Cys Gln Arg
1 5 10 15

Glu Asn Leu Met Phe Lys Glu His Phe Pro Leu Ala Asp Val Thr Ala 20 25 30

Gly Phe Val Phe His Met Cys Phe Ser Tyr Thr His Leu Asn Ala Phe 35 40 45

Lys His Leu 50

<210> 1195

<211> 269

<212> PRT

<213> Homo sapiens

<220>

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<222> (245)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (246)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<222> (257)

<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (266) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1195 Pro Ala Glu Asp Ala Ala Ser Leu Thr Trp Gly Val Ala Ile Arg Ala Gly Arg Ser Trp Phe Ser Gly Pro Ala Ala Pro Ala Ala Ala Met Ser Phe Phe Pro Glu Leu Tyr Phe Asn Val Asp Asn Gly Tyr Leu Glu Gly Leu Val Arg Gly Leu Lys Ala Gly Val Leu Ser Gln Ala Asp Tyr Leu 55 Asn Leu Val Gln Cys Glu Thr Leu Glu Asp Leu Lys Leu His Leu Gln 75 70 Ser Thr Asp Tyr Gly Asn Phe Leu Ala Asn Glu Ala Ser Pro Leu Thr Val Ser Val Ile Asp Asp Arg Leu Lys Glu Lys Met Val Val Glu Phe 105 Arg His Met Arg Asn His Ala Tyr Glu Pro Leu Ala Ser Phe Leu Asp 120 115 Phe Ile Thr Tyr Ser Tyr Met Ile Asp Asn Val Ile Leu Leu Ile Thr 135 Gly Thr Leu His Gln Arg Ser Ile Ala Glu Leu Val Pro Lys Cys His 145 150 155 Pro Leu Gly Ser Phe Glu Gln Met Glu Ala Val Asn Ile Ala Gln Thr 165 Pro Ala Glu Leu Tyr Asn Ala Ile Leu Val Asp Thr Pro Leu Ala Ala 185 Phe Phe Gln Asp Cys Ile Ser Glu Gln Asp Leu Asp Glu Met Asn Ile 205 195 200 Glu Ile Ile Arg Asn Thr Leu Tyr Lys Ala Tyr Leu Glu Ser Phe Tyr 210 Lys Phe Cys Thr Leu Leu Gly Gly Thr Thr Ala Asp Ala Met Cys Pro

1216

225 230 235 240

Ile Leu Glu Phe Xaa Xaa Gln Thr Val Pro Ser Ser Phe His Thr Val 245 250 255

Xaa Gly Ser Thr Leu Arg Ala Trp Arg Xaa Gly Ser Gly
260 265

<210> 1196

<211> 301

<212> PRT

<213> Homo sapiens

<400> 1196

Arg His Glu Pro Ala Pro Arg Glu Ala Pro Gly Ser Arg Ala Ser Ala 1 5 10 15

Phe Leu Leu Pro Ser Phe Leu Pro Gly Pro Arg Leu Val Pro Ala Gly 20 25 30

His Pro Thr Ala Thr Met Phe Val Pro Cys Gly Glu Ser Ala Pro Asp $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Leu Ala Gly Phe Thr Leu Leu Met Pro Ala Val Ser Val Gly Asn Val
50 55 60

Gly Gln Leu Ala Met Asp Leu Ile Ile Ser Thr Leu Asn Met Ser Lys
65 70 75 80

Ile Gly Tyr Phe Tyr Thr Asp Cys Leu Val Pro Met Val Gly Asn Asn 85 90 95

Pro Tyr Ala Thr Thr Glu Gly Asn Ser Thr Glu Leu Ser Ile Asn Ala 100 105 110

Glu Val Tyr Ser Leu Pro Ser Arg Lys Leu Val Ala Leu Gln Leu Arg 115 120 125

Ser Ile Phe Ile Lys Tyr Lys Ser Lys Pro Phe Cys Glu Lys Leu Leu 130 135 140

Ser Trp Val Lys Ser Ser Gly Cys Ala Arg Val Ile Val Leu Ser Ser 145 150 155 160

Ser His Ser Tyr Gln Arg Asn Asp Leu Gln Leu Arg Ser Thr Pro Phe 165 170 175

Arg Tyr Leu Leu Thr Pro Ser Met Gln Lys Ser Val Gln Asn Lys Ile 180 185 190

1217

Lys Ser Leu Asn Trp Glu Glu Met Glu Lys Ser Arg Cys Ile Pro Glu 195 200 Ile Asp Asp Ser Glu Phe Cys Ile Arg Ile Pro Gly Gly Ile Thr 220 210 215 Lys Thr Leu Tyr Asp Glu Ser Cys Ser Lys Glu Ile Gln Met Ala Val 230 235 Leu Leu Lys Phe Val Ser Glu Gly Asp Asn Ile Pro Asp Ala Leu Gly 245 250 Leu Val Glu Tyr Leu Asn Glu Trp Leu Gln Ile Leu Lys Pro Leu Ser 260 265 Asp Asp Pro Thr Val Ser Ala Ser Arg Trp Lys Ile Pro Ser Ser Trp 280 Arg Leu Leu Phe Gly Ser Gly Leu Pro Pro Ala Leu Phe 295 <210> 1197 <211> 246 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (49) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (65) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (230) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1197 Gly Thr Arg Asp Leu Leu Ala Ala Ala Ala Thr Gly Lys Leu Lys Ser Phe Ala Arg Lys Phe Ile Asn Leu Asn Glu Phe Thr Tyr

1218

Gly Ser Glu Glu Ser Thr Lys Pro Ala Ser Val Arg Ala Leu Leu Phe 40 Xaa Ile Ser Phe Leu Met Leu Cys His Val Ala Gln Thr Tyr Gly Ser 55 Xaa Val Ile Leu Ser Glu Ser Arg Thr Gly Ala Glu Val Pro Phe Phe 75 70 Glu Thr Trp Met Gln Thr Cys Met Pro Glu Glu Gly Lys Ile Leu Asn Pro Asp His Pro Cys Phe Arg Pro Asp Ser Thr Lys Val Glu Ser Leu 105 Val Ala Leu Leu Asn Asn Ser Ser Glu Met Lys Leu Val Gln Met Lys 115 120 Trp His Glu Ala Cys Leu Ser Ile Ser Ala Ala Ile Leu Glu Ile Leu 135 Asn Ala Trp Glu Asn Gly Val Leu Ala Phe Glu Ser Ile Gln Lys Ile 155 Thr Asp Asn Ile Lys Gly Lys Val Cys Ser Leu Ala Val Cys Ala Val 165 170 Ala Trp Leu Val Ala His Val Arg Met Leu Gly Leu Asp Glu Arg Glu 185 Lys Ser Leu Gln Met Ile Arg Gln Leu Ala Gly Pro Leu Phe Ser Glu 200 Asn Thr Leu Gln Phe Tyr Asn Glu Arg Val Val Ile Met Asn Ser Ile 210

Leu Gly Ala His Val Xaa Arg Arg Ala Ala Asp Ser His Ala Gly

235

Phe Lys Phe Pro Ser Asn 245

<210> 1198

<211> 465

<212> PRT

<213> Homo sapiens

<220>

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<400> 1198
Lys Asn Met Glu Thr Glu Gln Pro Glu Glu Thr Phe Pro Asn Thr Glu
1 5 10 15
Thr Asn Gly Glu Phe Gly Lys Arg Pro Ala Glu Asp Met Glu Glu Glu
20 25 30
Gln Ala Phe Lys Arg Ser Arg Asn Thr Asp Glu Met Val Glu Leu Arg
35 40 45
Ile Leu Leu Gln Ser Lys Asn Ala Gly Ala Val Ile Gly Lys Gly Gly
50 55 60
Two Acn The Iwa Ale Iou Ara Mbr Acn Mur Acn Ale Sor Wel Sor Wel
Lys Asn Ile Lys Ala Leu Arg Thr Asp Tyr Asn Ala Ser Val Ser Val 65 70 75 80
75
Pro Asp Ser Ser Gly Pro Glu Arg Ile Leu Ser Ile Ser Ala Asp Ile
85 90 95
Glu Thr Ile Gly Glu Ile Leu Lys Lys Ile Ile Pro Thr Leu Glu Glu
100 105 110
Gly Leu Gln Leu Pro Ser Pro Thr Ala Thr Ser Gln Leu Pro Leu Glu
115 120 125
Ser Asp Ala Val Glu Cys Leu Asn Tyr Gln His Tyr Lys Gly Ser Asp
130 135 140
Phe Asp Cys Glu Leu Arg Leu Leu Ile His Gln Ser Leu Ala Gly Gly
145 150 155 160
Ile Ile Gly Val Lys Gly Ala Lys Ile Lys Glu Leu Arg Glu Asn Thr
165 170 175
Gln Thr Thr Ile Lys Leu Phe Gln Glu Cys Cys Pro His Ser Thr Asp
180 185 190
Arg Val Val Leu Ile Gly Gly Lys Pro Asp Xaa Val Val Glu Cys Ile
Arg var var bea ric ory ory bys fro asp and var var ord cys fre

1220

		195					200					205			
Lys	Ile 210	Ile	Leu	Asp	Leu	Ile 215	Ser	Glu	Ser	Pro	Ile 220	Lys	Gly	Arg	Ala
Gln 225	Pro	Tyr	Asp	Pro	Asn 230	Phe	Tyr	Asp	Glu	Thr 235	Tyr	Asp	Tyr	Gly	Gly 240
Phe	Thr	Met	Met	Phe 245	Asp	Asp	Arg	Arg	Gly 250	Arg	Pro	Val	Gly	Phe 255	Pro
Met	Arg	Gly	Arg 260	Gly	Gly	Phe	Asp	Arg 265	Met	Pro	Pro	Gly	Arg 270	Gly	Gly
Arg	Pro	Met 275	Pro	Pro	Ser	Arg	Arg 280	Asp	Tyr	Asp	Asp	Met 285	Ser	Pro	Arg
Arg	Gly 290	Pro	Pro	Pro	Pro	Pro 295	Pro	Gly	Arg	Gly	Gly 300	Arg	Gly	Gly	Ser
Arg 305	Ala	Arg	Asn	Leu	Pro 310	Leu	Pro	Pro	Pro	Pro 315	Pro	Pro	Arg	Gly	Gly 320
Asp	Leu	Met	Ala	Tyr 325	Asp	Arg	Arg	Gly	Arg 330	Pro	Gly	Asp	Arg	Туг 335	Asp
Gly	Met	Val	Gly 340	Phe	Ser	Ala	Asp	Glu 345	Thr	Trp	Asp	Ser	Ala 350	Ile	Asp
Thr	Trp	Ser 355	Pro	Ser	Glu	Trp	Gln 360	Met	Ala	Tyr	Glu	Pro 365	Gln	Gly	Gly
Ser	Gly 370	Tyr	Asp	Tyr	Ser	Tyr 375	Ala	Gly	Gly	Arg	Gly 380	Ser	Tyr	Gly	Asp
Leu 385	Gly	Gly	Pro	Ile	Ile 390	Thr	Thr	Gln	Val	Thr 395	Ile	Pro	Lys	Asp	Leu 400
Ala	Gly	Ser	Ile	Ile 405	Gly	Lys	Gly	Gly	Gln 410	Arg	Ile	Lys	Gln	Ile 415	Arg
His	Glu	Ser	Gly 420	Ala	Ser	Ile	Lys	Ile 425	Asp	Glu	Pro	Leu	Glu 430	Gly	Ser
Glu	Asp	Arg 435	Ile	Ile	Thr	Ile	Thr 440	Gly	Thr	Gln	Asp	Gln 445	Ile	Gln	Asn
Ala	Gln 450	Tyr	Leu	Leu	Gln	Asn 455	Ser	Val	Ser	Ser	Xaa 460	Xaa	Leu	Ala	Leu

Cys

1221

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<211> 446
<212> PRT
<213> Homo sapiens
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<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (87)
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<220>
<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids
Tyr Pro Ala Ala Cys Xaa Thr Gly Pro Glu Phe Pro Gly Arg Pro Thr
Arg Pro His Glu Met Asp Gln Tyr Trp Gly Ile Gly Ser Leu Ala Ser
                                25
Gly Ile Asn Leu Phe Thr Asn Ser Phe Glu Gly Pro Val Leu Asp His
                                                 45
         35
                             40
Arg Tyr Tyr Ala Gly Gly Cys Ser Pro His Tyr Ile Leu Asn Thr Arg
                         55
Phe Arg Lys Pro Tyr Asn Val Glu Ser Tyr Thr Pro Gln Thr Gln Gly
                    70
                                        75
Lys Tyr Glu Phe Ile Leu Xaa Xaa Tyr Glu Ser Tyr Ser Asp Phe Glu
                 85
Arg Asn Val Thr Glu Lys Met Ala Ser Lys Ser Gly Phe Ser Phe Gly
            100
                                105
Phe Lys Ile Pro Gly Ile Phe Glu Leu Gly Ile Ser Ser Gln Ser Asp
                            120
Arg Gly Lys His Tyr Ile Arg Arg Thr Lys Arg Phe Ser His Thr Lys
   130
                       135
                                            140
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Ser 145	Val	Phe	Leu	His	Ala 150	Arg	Ser	Asp	Leu	Glu 155	Val	Ala	His	Tyr	Lys 160
Leu	Lys	Pro	Arg	Ser 165	Leu	Met	Leu	His	Tyr 170	Glu	Phe	Leu	Gln	Arg 175	Val
Lys	Arg	Leu	Pro 180	Leu	Glu	Tyr	Ser	Туг 185	Gly	Glu	Tyr	Arg	Asp 190	Leu	Phe
Arg	Asp	Phe 195	Gly	Thr	His	Tyr	Ile 200	Thr	Glu	Ala	Val	Leu 205	Gly	Gly	Ile
Tyr	Glu 210	Tyr	Thr	Leu	Val	Met 215	Asn	Lys	Glu	Ala	Met 220	Glu	Arg	Gly	Asp
Tyr 225	Thr	Leu	Asn	Asn	Val 230	His	Ala	Cys	Ala	Lys 235	Asn	Asp	Phe	Lys	Ile 240
Gly	Gly	Ala	Ile	Glu 245	Glu	Val	Tyr	Val	Ser 250	Leu	Gly	Val	Ser	Val 255	Gly
Lys	Cys	Arg	Gly 260	Ile	Leu	Asn	Glu	Ile 265	Lys	Asp	Arg	Asn	Lys 270	Arg	Asp
Thr	Met	Val 275	Glu	Asp	Leu	Val	Val 280	Leu	Val	Arg	Gly	Gly 285	Ala	Ser	Glu
His	Ile 290	Thr	Thr	Leu	Ala	Tyr 295	Gln	Glu	Leu	Pro	Thr 300	Ala	Asp	Leu	Met
Gln 305	Glu	Trp	Gly	Asp	Ala 310	Val	Gln	Tyr	Asn	Pro 315	Ala	Ile	Ile	Lys	Val 320
Lys	Val	Glu	Pro	Leu 325	Tyr	Glu	Leu	Val	Thr 330	Ala	Thr	Asp	Phe	Ala 335	Tyr
Ser	Ser	Thr	Val 340	Arg	Gln	Asn	Met	Lys 345	Gln	Ala	Leu	Glu	Glu 350	Phe	Gln
Lys	Glu	Val 355	Ser	Ser	Cys	His	Cys 360	Ala	Pro	Cys	Gln	Gly 365	Asn	Gly	Val
Pro	Val 370	Leu	Lys	Gly	Ser	Arg 375	Cys	Asp	Cys	Ile	Cys 380	Pro	Val	Gly	Ser
Gln 385	Gly	Leu	Ala	Cys	Glu 390	Val	Ser	Tyr	Arg	Lys 395	Asn	Thr	Pro	Ile	Asp 400
Gly	Lys	Trp	Asn	Cys 405	Trp	Ser	Asn	Trp	Ser 410	Ser	Cys	Ser	Gly	Arg 415	Arg

Lys Thr Arg Gln Arg Gln Cys Asn Asn Pro Pro Pro Gln Asn Gly Gly
420 425 430

Ser Pro Cys Ser Gly Pro Ala Ser Glu Thr Leu Asp Cys Ser 435 440 445

<210> 1200

<211> 437

<212> PRT

<213> Homo sapiens

<400> 1200

Leu Gly Ser Ser Asp Ser Tyr Ala Ser Pro Gly Arg Ala Ala Pro
1 5 10 15

Pro Ala Ala Gly Pro Gly Asp Thr Ser Ala Cys Tyr Lys Ser Ser 20 25 30

Gly Pro Arg Cys Leu Leu Pro Asp Leu Ala Pro Ser Ser Glu Pro Gly 35 40 45

Ala Cys Leu Gly Gly Leu Ser Val Phe Thr Met Glu Gln Leu Ser Ser 50 55 60

Ala Asn Thr Arg Phe Ala Leu Asp Leu Phe Leu Ala Leu Ser Glu Asn 65 70 75 80

Asn Pro Ala Gly Asn Ile Phe Ile Ser Pro Phe Ser Ile Ser Ser Ala 85 90 95

Met Ala Met Val Phe Leu Gly Thr Arg Gly Asn Thr Ala Ala Gln Leu 100 105 110

Ser Lys Thr Phe His Phe Asn Thr Val Glu Glu Val His Ser Arg Phe 115 120 125

Gln Ser Leu Asn Ala Asp Ile Asn Lys Arg Gly Ala Ser Tyr Ile Leu 130 135 140

Lys Leu Ala Asn Arg Leu Tyr Gly Glu Lys Thr Tyr Asn Phe Leu Pro 145 150 155 160

Glu Phe Leu Val Ser Thr Gln Lys Thr Tyr Gly Ala Asp Leu Ala Ser 165 170 175

Val Asp Phe Gln His Ala Ser Glu Asp Ala Arg Lys Thr Ile Asn Gln 180 185 190

1224

Trp	Val	Lys 195	Gly	Gln	Thr	Glu	Gly 200	Lys	Ile	Pro	Glu	Leu 205	Leu	Ala	Ser
Gly	Met 210	Val	Asp	Asn	Met	Thr 215	Lys	Leu	Val	Leu	Val 220	Asn	Ala	Ile	Tyr
Phe 225	Lys	Gly	Asn	Trp	Lys 230	Asp	Lys	Phe	Met	Lys 235	Glu	Ala	Thr	Thr	Asn 240
Ala	Pro	Phe	Arg	Leu 245	Asn	Lys	Lys	Asp	Arg 250	Lys	Thr	Val	Lys	Met 255	Met
туr	Gln	Lys	Lys 260	Lys	Phe	Ala	Tyr	Gly 265	Tyr	Ile	Glu	Asp	Leu 270	Lys	Cys
Arg	Val	Leu 275	Glu	Leu	Pro	Tyr	Gln 280	Gly	Glu	Glu	Leu	Ser 285	Met	Val	Ile
Leu	Leu 290	Pro	Asp	Asp	Ile	Glu 295	Asp	Glu	Ser	Thr	Gly 300	Leu	Lys	Lys	Ile
Glu 305	Glu	Gln	Leu	Thr	Leu 310	Glu	Lys	Leu	His	Glu 315	Trp	Thr	Lys	Pro	Glu 320
Asn	Leu	Asp	Phe	Ile 325	Glu	Val	Asn	Val	Ser 330	Leu	Pro	Arg	Phe	Lys 335	Leu
Glu	Glu	Ser	Tyr 340	Thr	Leu	Asn	Ser	Asp 345	Leu	Ala	Arg	Leu	Gly 350	Val	Gln
Asp	Leu	Phe 355	Asn	Ser	Ser	Lys	Ala 360	Asp	Leu	Ser	Gly	Met 365	Ser	Gly	Ala
Arg	Asp 370	Ile	Phe	Ile	Ser	Lys 375	Ile	Val	His	Lys	Ser 380	Phe	Val	Glu	Val
Asn 385	Glu	Glu	Gly	Thr	Glu 390	Ala	Ala	Ala	Ala	Thr 395	Ala	Gly	Ile	Ala	Thr 400
Phe	Cys	Met	Leu	Met 405	Pro	Glu	Glu	Asn	Phe 410	Thr	Ala	Asp	His	Pro 415	Phe
Leu	Phe	Phe	Ile 420	Arg	His	Asn	Ser	Ser 425	Gly	Ser	Ile	Leu	Phe 430	Leu	Gly
Arg	Phe	Ser 435	Ser	Pro											

<210> 1201

1225

<211> 82 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (82) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1201 Gln Leu Gly Pro Val Val Gly Gly Trp Tyr Lys Val Leu Asp Arg Phe 10 Ile Pro Gly Thr Thr Lys Val Asp Ala Leu Lys Lys Met Leu Leu Asp Gln Gly Gly Phe Ala Pro Cys Phe Leu Gly Cys Phe Leu Pro Leu Val Gly Ala Leu Asn Gly Leu Ser Ala Gln Asp Asn Trp Pro Asn Tyr Ser 55 Gly Ile Ile Leu Met Pro Leu Ser Pro Thr Thr Ile Tyr Gly Leu Leu 65 70 75 Cys Xaa <210> 1202 <211> 126 <212> PRT <213> Homo sapiens <400> 1202 Ile Ser Arg Ser Ser Ala Arg Arg Gln Pro Phe Arg His Gly Arg Leu 10 Trp Arg Ala Ala Met Ala Leu Arg Tyr Pro Met Ala Val Gly Leu 25 Asn Lys Gly His Lys Val Thr Lys Asn Val Ser Lys Pro Arg His Ser 35 Arg Arg Gly Arg Leu Thr Lys His Thr Lys Phe Val Arg Asp Met Ile Arg Glu Val Cys Gly Phe Ala Pro Tyr Glu Arg Arg Ala Met Glu

75

1226

Leu Leu Lys Val Ser Lys Asp Lys Arg Ala Leu Lys Phe Ile Lys Lys
85 90 95

Arg Val Gly Thr His Ile Arg Ala Lys Arg Lys Arg Glu Glu Leu Ser 100 105 110

Asn Val Leu Ala Ala Met Arg Lys Ala Ala Ala Lys Lys Asp 115 120 125

<210> 1203

<211> 130

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1203

Asp Trp Asn Pro Asp Leu Gln Ala Ser Ala Val Cys Ile Lys Arg Val 1 5 10 15

Gly Glu Ser Gly Pro Leu Ala Gln Glu Pro Xaa Leu Leu Lys Glu Gly

Phe Lys Ala Lys Trp Val Cys Gln Arg Cys Cys Leu Pro Phe Leu Glu 35 40 45

Met Leu Ile Ser Leu Ser Lys Thr Glu Lys Ser Arg Cys Tyr Arg Asn 50 60

Asn Leu Val Cys Cys Ile Asn Cys Ser Trp Ala Trp Ser Ser Ile Pro 65 70 75 80

Thr Leu Arg Phe Pro Ala Ser Leu Cys Cys Pro Gly Ser His Ser Cys
85 90 95

Arg Arg Pro Asn Pro Leu Ala Val Phe Cys Leu Lys Ile Trp Gly Ala 100 105 110

Pro Ser Leu Ser Ser Pro Gly Asn Ser Leu Ala Glu Gly Gly Asp Pro 115 120 125

Pro Gln

WO 00/55350

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<210> 1204
<211> 228
<212> PRT
<213> Homo sapiens
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<222> (189)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<400> 1204
Trp Ala Ala Phe Glu Pro Ala Thr Leu Ala Trp Lys Phe Pro Phe Gln
Ser Gly Phe Cys Leu Leu Pro Ser Pro Ser Pro Arg Tyr Leu Phe
             20
                                 25
Thr Ser His Leu Ile Ser Leu Cys Ser Ser Val Ser Pro Thr His Ile
                             40
Ile Gly Asp Ser Gly Gly Ser Leu Thr Ser Leu Leu Ser Asn Ala Arg
     50
Pro Ser Gly Leu Ala Ser Val Ala Ser His Ile Asp Val Thr Leu Glu
 65
                                         75
Leu Leu Pro Gln Arg Gly Arg Arg Asp Arg Leu Ser Pro His Leu Pro
                                     90
                 85
Pro Tyr Ser Pro Leu Tyr Ser Arg Phe Asp His Leu Ser Pro Ser Ala
            100
                                105
                                                    110
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1228

Ala Pro Ser His Phe Gly Gln Ser Gln Ala Pro Ile Arg Leu Pro Pro 115 120 125

Pro Pro Gly Ala Pro Ser Ile Ser Leu Ser Pro Leu Pro Gln Asn Leu 130 135 140

Cys Lys Gly Tyr Glu Arg Asp Pro Leu Pro Ser Arg Pro Pro Leu Arg 145 150 155 160

Ala Val Arg Ser Lys Lys Gln Lys Leu Val Gly Gly Trp Leu Gly Leu 165 170 175

Cys Pro Val Pro Arg Trp Asp Lys Leu Ala Phe Ser Xaa Ile Pro Ser 180 185 190

Trp Val Pro Xaa Ser Phe Xaa Ala Pro Gly Ala Arg Thr His Cys Ala 195 200 205

Val Phe Leu Phe Ser Phe Val Gly Lys Gly Thr Lys Val Phe Ala Lys 210 215 220

Xaa Pro Val Xaa 225

<210> 1205

<211> 270

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (128)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1205

Leu Pro Gly Ala Val Ala Ala Ser Ser Gly Ser Pro Pro Gly Ser Ala 1 5 10 15

Leu Ala Ala Val Ala Ser Gly Gly Asp Leu Phe Pro Gly Gln Pro Val 20 25 30

Ser Glu Leu Ile Ala Gln Leu Leu Arg Ala Glu Pro Tyr Pro Ala Ala 35 40 45

Ala Gly Arg Phe Gly Ala Gly Gly Gly Ala Ala Gly Ala Val Leu Gly 50 55 60

Ile Asp Asn Val Cys Glu Leu Ala Ala Arg Leu Leu Phe Ser Thr Val

1229

75 65 70 80 Glu Trp Ala Arg His Ala Pro Phe Phe Pro Glu Leu Pro Val Ala Asp 85 Gln Val Ala Leu Leu Arg Leu Ser Trp Ser Glu Leu Phe Val Leu Asn 105 100 Ala Ala Gln Ala Leu Pro Leu His Thr Ala Pro Leu Leu Ala Xaa 120 Ala Gly Leu His Ala Ala Pro Met Ala Ala Glu Arg Ala Val Ala Phe 135 Met Asp Gln Val Arg Ala Phe Gln Glu Gln Val Asp Lys Leu Gly Arg 150 155 Leu Gln Val Asp Ser Ala Glu Tyr Gly Cys Leu Lys Ala Ile Ala Leu 170 Phe Thr Pro Asp Ala Cys Gly Leu Ser Asp Pro Ala His Val Glu Ser 180 185 Leu Gln Glu Lys Ala Gln Val Ala Leu Thr Glu Tyr Val Arg Ala Gln Tyr Pro Ser Gln Pro Gln Arg Phe Gly Arg Leu Leu Arg Leu Pro 215 Ala Leu Arg Ala Val Pro Ala Ser Leu Ile Ser Gln Leu Phe Phe Met 235 225 230 Arg Leu Val Gly Lys Thr Pro Ile Glu Thr Leu Ile Arg Asp Met Leu 250 245 Leu Ser Gly Ser Thr Phe Asn Trp Pro Tyr Gly Ser Gly Gln 260 265

<210> 1206

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1206

Met Phe His Cys Ser Asp Lys Tyr Phe Thr Phe Phe Ser Val His Gln 1 5 10 15

Arg Glu Arg Asp Pro Pro Thr Ala Val Thr Ser Lys Cys Ser Cys Ser 20 25 30

1230

Ile Asn Gly Val Thr Asp Thr Glu Val His Ser Trp Phe Leu Ser Arg 35 40 45

Val Val Ile Leu Val Ser Trp Ser Leu Gly His Trp Gly Cys Thr Leu 50 55 60

Lys Ser Pro Asn Arg Leu Ala Ile Lys Ile Asn Lys Ala Ala Ala Pro 65 70 75 80

Phe Gln Phe Thr Phe His Leu Thr Gln 85

<210> 1207

<211> 145

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (137)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1207

Cys Val Gly Lys Ala Gly Val Glu Leu Gly Cys Ser Gly Glu Gly Val
1 5 10 15

Val Lys Lys Ala Ser Ser Arg Gly His Lys Ala Arg Phe Pro Leu Arg
20 25 30

Ser His Lys Val Leu Ser Pro Ala Pro Gly Ala Gly Gly Val His Gly 35 40 45

Pro Gly Phe Thr Ser Thr His Pro Ala His Pro Arg Gly Glu Gly Pro 50 55 60

Arg Ala Pro Gly Pro Ala Ala Asp Arg Ile Leu Cys Lys Leu Cys Ser 65 70 75 80

Val His Cys Lys Thr Pro Ala Gln Leu Ala Gly His Met Gln Thr His
85 90 95

Leu Gly Gly Ala Ala Pro Leu Ser Arg Glu Thr Pro Pro Ser His Ser
100 105 110

Pro Pro Ala Glu Gly Asp Pro Arg Thr His Gln Val Leu Val Arg Phe 115 120 125

Val Gln Trp Arg Arg Gln Arg Gln Xaa Arg Gln Arg Gln Arg Gln

1231

135 140 130 Gln 145 <210> 1208 <211> 378 <212> PRT <213> Homo sapiens <400> 1208 Ser Ala Ser Arg Ala Thr Ala Met Ser Ser Arg Gly Gly Lys Lys Ser Thr Lys Thr Ser Arg Ser Ala Lys Ala Gly Val Ile Phe Pro Val Gly Arg Met Leu Arg Tyr Ile Lys Lys Gly His Pro Lys Tyr Arg Ile Gly Val Gly Ala Pro Val Tyr Met Ala Ala Val Leu Glu Tyr Leu Thr Ala Glu Ile Leu Glu Leu Ala Gly Asn Ala Ala Arg Asp Asn Lys Lys 70 Gly Arg Val Thr Pro Arg His Ile Leu Leu Ala Val Ala Asn Asp Glu 90 Glu Leu Asn Gln Leu Leu Lys Gly Val Thr Ile Ala Ser Gly Gly Val 100 105 Leu Pro Asn Ile His Pro Glu Leu Leu Ala Lys Lys Arg Gly Ser Lys Gly Lys Leu Glu Ala Ile Ile Thr Pro Pro Pro Ala Lys Lys Ala Lys 135 Ser Pro Ser Gln Lys Lys Pro Val Ser Lys Lys Ala Gly Gly Lys Lys 145 150 Gly Ala Arg Lys Ser Lys Lys Gln Gly Glu Val Ser Lys Ala Ala Ser Ala Asp Ser Thr Thr Glu Gly Thr Pro Ala Asp Gly Phe Thr Val Leu Ser Thr Lys Ser Leu Phe Leu Gly Gln Lys Leu Asn Leu Ile His Ser 195 200

1232

Glu Ile Ser Asn Leu Ala Gly Phe Glu Val Glu Ala Ile Ile Asn Pro 210 215 Thr Asn Ala Asp Ile Asp Leu Lys Asp Asp Leu Gly Asn Thr Leu Glu 235 225 230 Lys Lys Gly Gly Lys Glu Phe Val Glu Ala Val Leu Glu Leu Arg Lys 250 Lys Asn Gly Pro Leu Glu Val Ala Gly Ala Ala Val Ser Ala Gly His 265 Gly Leu Pro Ala Lys Phe Val Ile His Cys Asn Ser Pro Val Trp Gly 280 275 Ala Asp Lys Cys Glu Glu Leu Leu Glu Lys Thr Val Lys Asn Cys Leu 295 Ala Leu Ala Asp Asp Lys Lys Leu Lys Ser Ile Ala Phe Pro Ser Ile 310 315 Gly Ser Gly Arg Asn Gly Phe Pro Lys Gln Thr Ala Ala Gln Leu Ile 325 Leu Lys Ala Ile Ser Ser Tyr Phe Val Ser Thr Met Ser Ser Ser Ile 340 345 Lys Thr Val Tyr Phe Val Leu Phe Asp Ser Glu Ser Ile Gly Ile Tyr 360 Val Gln Glu Met Ala Lys Leu Asp Ala Asn 370 375 <210> 1209 <211> 220 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (6) <223> Xaa equals any of the naturally occurring L-amino acids <220>

<223> Xaa equals any of the naturally occurring L-amino acids

<221> SITE <222> (10)

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	1> S														
	2> (3 3> x	,	qual	s an	y of	the	nati	ural	ly o	ccur	ring	L-a	mino	acio	ds
<400	0> 1:	209													
			Lys	Ile 5	Xaa	Asp	Thr	Phe	Хаа 10	Arg	Tyr	Ala	Arg	Arg 15	Tyr
Arg	Ser	Gly	Ile 20	Pro	Gly	Ser	Thr	His 25	Ala	Xaa	Ala	Pro	Gly 30	Ala	Met
Arg	Leu	Ser 35	Leu	Pro	Leu	Leu	Leu 40	Leu	Leu	Leu	Gly	Ala 45	Trp	Ala	Ile
Pro	Gly 50	Gly	Leu	Gly	Asp	Arg 55	Ala	Pro	Leu	Thr	Ala 60	Thr	Ala	Pro	Gln
Leu 65	Asp	Asp	Glu	Glu	Met 70	Tyr	Ser	Ala	His	Met 75	Pro	Ala	His	Leu	Arg 80
Cys	Asp	Ala	Cys	Arg 85	Ala	Val	Ala	Tyr	Gln 90	Met	Trp	Gln	Asn	Leu 95	Ala
Lys	Ala	Glu	Thr 100	Lys	Leu	His	Thr	Ser 105	Asn	Ser	Gly	Gly	Arg 110	Arg	Glu
Leu	Ser	Glu 115	Leu	Val	туr	Thr	Asp 120	Val	Leu	Asp	Arg	Ser 125	Cys	Ser	Arg
Asn	Trp 130	Gln	Asp	Tyr	Gly	Val 135	Arg	Glu	Val	Asp	Gln 140	Val	Lys	Arg	Leu
Thr 145	Gly	Pro	Gly	Leu	Ser 150	Glu	Gly	Pro	Glu	Pro 155	Ser	Ile	Ser	Val	Met 160
Val	Thr	Gly	Gly	Pro 165	Trp	Pro	Thr	Arg	Leu 170	Ser	Arg	Thr	Cys	Leu 175	His
Tyr	Leu	Gly	Glu 180	Phe	Gly	Glu	Asp	Gln 185	Ile	Tyr	Glu	Ala	His 190	Gln	Gln
Gly	Arg	Gly 195	Ala	Leu	Glu	Ala	Leu 200	Leu	Cys	Gly	Gly	Pro 205	Gln	Gly	Ala
Cys	Ser 210	Glu	Lys	Val	Ser	Ala 215	Thr	Arg	Glu	Glu	Leu 220				

1234

<211> 231 <212> PRT <213> Homo sapiens <400> 1210

Ala Leu Ser Pro Ala Met Val Val Pro Glu Asp Gln Leu Thr Arg Trp 10

His Pro Arg Phe Asn Val Asp Glu Val Pro Asp Ile Glu Pro Ala Ala

Leu Pro Gln Pro Pro Ala Thr Glu Lys Leu Thr Thr Ala Gln Glu Val

Leu Ala Arg Ala Arg Asn Leu Ile Ser Pro Arg Met Glu Lys Ala Leu

Ser Gln Leu Ala Leu Arg Ser Ala Ala Pro Ser Ser Pro Gly Ser Pro 70 75

Arg Pro Ala Leu Pro Ala Thr Pro Pro Ala Thr Pro Pro Ala Ala Ser 85 90

Pro Ser Ala Leu Lys Gly Val Ser Gln Asp Leu Leu Glu Arg Ile Arg

Ala Lys Glu Ala Gln Lys Gln Leu Ala Gln Met Thr Arg Cys Pro Glu 120

Gln Glu Gln Arg Leu Gln Arg Leu Glu Arg Leu Pro Glu Leu Ala Arg 130 135

Val Leu Arg Ser Val Phe Val Ser Glu Arg Lys Pro Ala Leu Ser Met 150 155

Glu Val Ala Cys Ala Arg Met Val Gly Ser Cys Cys Thr Ile Met Ser 165 170

Pro Gly Glu Met Glu Lys His Leu Leu Leu Ser Glu Leu Leu Pro 180 185

Asp Trp Leu Ser Leu His Arg Ile Arg Thr Asp Thr Tyr Val Lys Leu 200

Asp Lys Ala Ala Asp Leu Ala His Ile Thr Ala Arg Leu Ala His Gln 210 215 220

Thr Arg Ala Glu Glu Gly Leu 225

<210> 1211

<21	1> 3	46													
	2> P														
<21	3> H	omo :	sapi	ens											
<40	0> 1:	211													
			Thr	Ile 5	Ser	Leu	Val	Tyr	Leu 10	His	Phe	Val	Phe	Tyr 15	Asn
Ser	Tyr	Ser	Leu 20	Phe	Pro	Ser	Lys	Glu 25	Asn	Cys	Val	Tyr	Glu 30	Thr	Val
Val	Leu	Pro 35	Leu	Asp	Glu	Arg	Ala 40	Phe	Glu	Lys	Thr	Leu 45	Thr	Pro	Ile
Ile	Gln 50	Glu	Tyr	Phe	Glu	His 55	Gly	Asp	Thr	Asn	Glu 60	Val	Ala	Glu	Met
Leu 65	Arg	Asp	Leu	Asn	Leu 70	Gly	Glu	Met	Lys	Ser 75	Gly	Val	Pro	Val	Leu 80
Ala	Val	Ser	Leu	Ala 85	Leu	Glu	Gly	Lys	Ala 90	Ser	His	Arg	Glu	Met 95	Thr
Ser	Lys	Leu	Leu 100	Ser	Asp	Leu	Cys	Gly 105	Thr	Val	Met	Ser	Thr 110	Thr	Asp
Val	Glu	Lys 115	Ser	Phe	Asp	Lys	Leu 120	Leu	Lys	Asp	Leu	Pro 125	Glu	Leu	Ala
Leu	Asp 130	Thr	Pro	Arg	Ala	Pro 135	Gln	Leu	Val	Gly	Gln 140	Phe	Ile	Ala	Arg
Ala 145	Val	Gly	Asp	Gly	Ile 150	Leu	Cys	Asn	Thr	Tyr 155	Ile	Asp	Ser	Tyr	Lys 160
Gly	Thr	Val	Asp	Cys 165	Val	Gln	Ala	Arg	Ala 170	Ala	Leu	Asp	Lys	Ala 175	Thr
Val	Leu	Leu	Ser 180	Met	Ser	Lys	Gly	Gly 185	Lys	Arg	Lys	Asp	Ser 190	Val	Trp
Gly	Ser	Gly 195	Gly	Gly	Gln	Gln	Ser 200	Val	Asn	His	Leu	Val 205	Lys	Glu	Ile
Asp	Met 210	Leu	Leu	Lys	Glu	Туг 215	Leu	Leu	Ser	Gly	Asp 220	Ile	Ser	Glu	Ala
Glu 225	His	Cys	Leu	Lys	Glu 230	Leu	Glu	Val	Pro	His 235	Phe	His	His	Glu	Leu 240

1236

 Val
 Tyr
 Glu
 Ala
 Ile
 Met
 Val
 Leu
 Glu
 Ser
 Thr
 Gly
 Glu
 Ser
 Thr

 Phe
 Lys
 Met
 Ile
 Leu
 Asp
 Leu
 Lys
 Ser
 Leu
 Trp
 Lys
 Ser
 Ser
 Thr

 Ile
 Thr
 Val
 Asp
 Glu
 Met
 Lys
 Arg
 Gly
 Tyr
 Glu
 Arg
 Ile
 Tyr
 Asn
 Glu
 Asn
 Glu
 Asp
 Val
 Pro
 His
 Ser
 Tyr
 Ser
 Val
 Leu
 Glu
 G

345

<210> 1212 <211> 175 <212> PRT <213> Homo sapiens <220> <221> SITE

340

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1212

Pro Arg Xaa Ile Val Ser Ala Ala Cys Gly Arg Asn His Thr Leu Ala 1 5 10 15

Leu Thr Glu Thr Gly Ser Val Phe Ala Phe Gly Glu Asn Lys Met Gly
20 25 30

Gln Leu Gly Leu Gly Asn Gln Thr Asp Ala Val Pro Ser Pro Ala Gln 35 40 45

Ile Met Tyr Asn Gly Gln Pro Ile Thr Lys Met Ala Cys Gly Xaa Glu 50 55 60

Phe Ser Met Ile Met Asp Cys Lys Gly Asn Leu Tyr Ser Phe Gly Cys 65 70 75 80

Pro Glu Tyr Gly Gln Leu Gly His Asn Ser Asp Gly Lys Phe Ile Ala 85 90 95

Arg Ala Gln Arg Ile Glu Tyr Asp Cys Glu Leu Val Pro Arg Arg Val
100 105 110

Ala Ile Phe Ile Glu Lys Thr Lys Asp Gly Gln Ile Leu Pro Val Pro 115 120 125

Asn Val Val Arg Asp Val Ala Cys Gly Ala Asn His Thr Leu Val 130 135 140

Leu Asp Ser Gln Lys Arg Val Phe Ser Trp Gly Phe Gly Gly Tyr Gly 145 150 155 160

Arg Leu Gly Thr Gln Ser Arg Arg Met Arg Trp Ser Pro Ala Trp 165 170 175

<210> 1213

<211> 127

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1213

Cys Phe Ile Cys Val Trp Cys Lys Arg Lys Leu Asp Gln Ile Asn Leu 1 5 10 15

Gln Leu Met Ser Pro Asn Ala Asn Thr Gly Thr His Met His Thr Pro
20 25 30

Ile Asn Thr His Thr Val His Leu Xaa Lys Gly Gln Val Ile Ser His $35 \hspace{1cm} 40 \hspace{1cm} 45$

Pro Asn Phe Thr Ser Thr Asp Pro Leu Ala Pro Thr Pro Ala Ser Thr 50 55 60

Val Thr Ser Lys Ala Arg Ala Thr Cys Ala His Gln Thr Cys Ile Lys
65 70 75 80

Gln Leu Ala Gly Asp Gly Cys Gly Ala Gly Gly Leu Ser Asp Gly Ser

1238

85 90 95

Leu Leu Pro Leu Leu Arg Val Lys Leu Leu Ser Phe Leu Arg Val 100 105 110

Tyr Leu Cys Gln Val Cys Ala Phe Asn Cys Phe Tyr Phe Val Phe 115 120 125

<210> 1214

<211> 146

<212> PRT

<213> Homo sapiens

<400> 1214

Cys Thr Trp Asn Arg Cys Ser Ala Ser Pro Ala Gly Trp Gln Asn Ser 1 5 10 15

Phe Leu Gly His Leu Asn Pro Ser Ser Leu Leu Gln Asn Pro Pro Ala 20 25 30

Asn Arg Ile Gly Met Gly Ala Thr Leu Asp Ile Gln Arg Gln Gln Arg 35 40 45

Met Glu Leu Leu Asp Arg Gln Leu Met Phe Ser Gln Phe Ala Gln Gly 50 55 60

Arg Arg Gln Arg Gln Gln Gln Gly Gly Met Ile Asn Trp Asn Arg Leu 65 70 75 80

Phe Pro Pro Leu Arg Gln Arg Gln Asn Val Asn Tyr Gln Gly Gly Arg 85 90 95

Gln Ser Glu Pro Ala Ala Pro Pro Leu Glu Val Ser Glu Glu Gln Val 100 105 110

Ala Arg Leu Met Glu Met Gly Phe Ser Arg Gly Asp Ala Leu Glu Ala 115 120 125

Leu Arg Ala Ser Asn Asn Asp Leu Asn Val Ala Thr Asn Phe Leu Leu 130 135 140

Gln His 145

<210> 1215

<211> 116

<212> PRT

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<213> Homo sapiens
<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1215
Leu Lys Asn His Gln Lys Thr His Thr Ser Glu Lys Ser Tyr Lys Cys
Asn Glu Cys Arg Lys Ala Phe Ser Tyr Cys Ser Gly Leu Ile Gln Cys
                                 25
Gln Val Ile His Thr Ile Glu Lys Pro Tyr Glu Tyr Gly Lys Cys Gly
                             40
Lys Ala Phe Arg Gln Arg Thr Asp Leu Lys Lys His Gln Lys Met His
     50
Thr Glu Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser
Gln Ser Thr Tyr Leu Thr Lys His Gln Lys Ile His Ser Glu Glu Lys
                                     90
Ser Asn Ile His Thr Glu Cys Gly Glu Thr Xaa Xaa Gln Asn Ser Ser
                                105
                                                    110
            100
Phe Leu Gln Gln
        115
<210> 1216
<211> 201
<212> PRT
<213> Homo sapiens
<400> 1216
Ala Ala Gly Gly Glu Gly Phe Gly Ser Leu His Ala Ser Leu Val Gly
Phe Arg Gly Val Val Ala Gly Cys Ala Arg His Phe Arg Ala Ser Arg
             20
                                 25
```

1240

Pro Pro Ala Gly Ala Met Ile Pro Pro Pro Pro Ser Leu Pro Gly Pro 115 120 125

Pro Arg Pro Gly Met Met Pro Ala Pro His Met Gly Gly Pro Pro Met 130 135 140

Met Pro Met Met Gly Pro Pro Pro Pro Gly Met Met Pro Val Gly Pro 145 150 155 160

Ala Pro Gly Met Arg Pro Pro Met Gly Gly His Met Pro Met Met Pro 165 170 175

Gly Pro Pro Met Met Arg Pro Pro Ala Arg Pro Met Met Val Pro Thr
180 185 190

Arg Pro Gly Met Thr Arg Pro Asp Arg 195 200

<210> 1217

<211> 473

<212> PRT

<213> Homo sapiens

<400> 1217

Lys Phe Thr Met Lys Phe Leu Leu Ile Leu Leu Gln Ala Thr Ala 1 5 10 15

Ser Gly Ala Leu Pro Leu Asn Ser Ser Thr Ser Leu Glu Lys Asn Asn 20 25 30

Val Leu Phe Gly Glu Arg Tyr Leu Glu Lys Phe Tyr Gly Leu Glu Ile $35 \hspace{1cm} 40 \hspace{1cm} 45$

Asn Lys Leu Pro Val Thr Lys Met Lys Tyr Ser Gly Asn Leu Met Lys

	50					ככ					60				
Glu 65	Lys	Ile	Gln	Glu	Met 70	Gln	His	Phe	Leu	Gly 75	Leu	Lys	Val	Thr	Gly Gly
Gln	Leu	Asp	Thr	Ser 85	Thr	Leu	Glu	Met	Met 90	His	Ala	Pro	Arg	Cys 95	Gly
Val	Pro	Asp	Val 100	His	His	Phe	Arg	Glu 105	Met	Pro	Gly	Gly	Pro 110	Val	Trp
Arg	Lys	His 115	Tyr	Ile	Thr	Tyr	Arg 120	Ile	Asn	Asn	Tyr	Thr 125	Pro	Asp	Met
Asn	Arg 130	Glu	Asp	Val	Asp	Tyr 135	Ala	Ile	Arg	Lys	Ala 140	Phe	Gln	Val	Trp
Ser 145	Asn	Val	Thr	Pro	Leu 150	Lys	Phe	Ser	Lys	Ile 155	Asn	Thr	Gly	Met	Ala 160
Asp	Ile	Leu	Val	Val 165	Phe	Ala	Arg	Gly	Ala 170	His	Gly	Asp	Phe	His 175	Ala
Phe	Asp	Gly	Lys 180	Gly	Gly	Ile	Leu	Ala 185	His	Ala	Phe	Gly	Pro 190	Gly	Ser
Gly	Ile	Gly 195	Gly	Asp	Ala	His	Phe 200	Asp	Glu	Asp	Glu	Phe 205	Trp	Thr	Thr
His	Ser 210	Gly	Gly	Thr	Asn	Leu 215	Phe	Leu	Thr	Ala	Val 220	His	Glu	Ile	Gly
His 225	Ser	Leu	Gly	Leu	Gly 230	His	Ser	Ser	Asp	Pro 235	Lys	Ala	Val	Met	Phe 240
Pro	Thr	Tyr	Lys	Tyr 245	Val	Asp	Ile	Asn	Thr 250	Phe	Arg	Leu	Ser	Ala 255	Asp
Asp	Ile	Arg	Gly 260	Ile	Gln	Ser	Leu	Tyr 265	Gly	Asp	Pro	Lys	Glu 270	Asn	Glr
Arg	Leu	Pro 275	Asn	Pro	Asp	Asn	Ser 280	Glu	Pro	Ala	Leu	Cys 285	Asp	Pro	Asn
Leu	Ser 290	Phe	Asp	Ala	Val	Thr 295	Thr	Val	Gly	Asn	Lys 300	Ile	Phe	Phe	Phe
Lys 305	Asp	Arg	Phe	Phe	Trp 310	Leu	Lys	Val	Ser	Glu 315	Arg	Pro	Lys	Thr	Ser 320
Val	Asn	Leu	Ile	ser	Ser	Leu	Trp	Pro	Thr	Leu	Pro	Ser	Gly	Ile	Glu

1242

325 330 335 Ala Ala Tyr Glu Ile Glu Ala Arg Asn Gln Val Phe Leu Phe Lys Asp 345 340 Asp Lys Tyr Trp Leu Ile Ser Asn Leu Arg Pro Glu Pro Asn Tyr Pro 360 Lys Ser Ile His Ser Phe Gly Phe Pro Asn Phe Val Lys Lys Ile Asp 375 Ala Ala Val Phe Asn Pro Arg Phe Tyr Arg Thr Tyr Phe Phe Val Asp 395 385 390 Asn Gln Tyr Trp Arg Tyr Asp Glu Arg Arg Gln Met Met Asp Pro Gly 405 410 Tyr Pro Lys Leu Ile Thr Lys Asn Phe Gln Gly Ile Gly Pro Lys Ile 420 425 Asp Ala Val Phe Tyr Ser Lys Asn Lys Tyr Tyr Tyr Phe Phe Gln Gly 445 435 440 Ser Asn Gln Phe Glu Tyr Asp Phe Leu Leu Gln Arg Ile Thr Lys Thr Leu Lys Ser Asn Ser Trp Phe Gly Cys 470 <210> 1218 <211> 598 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (9) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (144) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1218 Ala Thr Ser Arg Gln Pro Ser Tyr Xaa Arg Thr Trp Cys Arg Arg Cys Cys Leu Pro Leu Ala Leu Asn Pro Val Pro Ala Ala Met Ala Pro Gly

			20					25					30		
Gln	Leu	Ala 35	Leu	Phe	Ser	Val	Ser 40	Asp	Lys	Thr	Gly	Leu 45	Val	Glu	Ph∈
Ala	Arg 50	Asn	Leu	Thr	Ala	Leu 55	Gly	Leu	Asn	Leu	Val 60	Ala	Ser	Gly	Gly
Thr 65	Ala	Lys	Ala	Leu	Arg 70	Asp	Ala	Gly	Leu	Ala 75	Val	Arg	Asp	Val	Ser 80
Glu	Leu	Thr	Gly	Phe 85	Pro	Glu	Met	Leu	Gly 90	Gly	Arg	Val	Lys	Thr 95	Leu
His	Pro	Ala	Val 100	His	Ala	Gly	Ile	Leu 105	Ala	Arg	Asn	Ile	Pro 110	Glu	Asp
Asn	Ala	Asp 115	Met	Ala	Arg	Leu	Asp 120	Phe	Asn	Leu	Ile	Arg 125	Val	Val	Ala
Cys	Asn 130	Leu	Tyr	Pro	Phe	Val 135	Lys	Thr	Val	Ala	Ser 140	Pro	Gly	Val	Xaa
Val 145	Glu	Glu	Ala	Val	Glu 150	Gln	Ile	Asp	Ile	Gly 155	Gly	Val	Thr	Leu	Leu 160
Arg	Ala	Ala	Ala	Lys 165	Asn	His	Ala	Arg	Val 170	Thr	Val	Val	Cys	Glu 175	Pro
Glu	Asp	Tyr	Val 180	Val	Val	Ser	Thr	Glu 185	Met	Gln	Ser	Ser	Glu 190	Ser	Lys
Asp	Thr	Ser 195	Leu	Glu	Thr	Arg	Arg 200	Gln	Leu	Ala	Leu	Lys 205	Ala	Phe	Thr
His	Thr 210	Ala	Gln	Tyr	Asp	Glu 215	Ala	Ile	Ser	Asp	Tyr 220	Phe	Arg	Lys	Gln
Tyr 225	Ser	Lys	Gly	Val	Ser 230	Gln	Met	Pro	Leu	Arg 235	Tyr	Gly	Met	Asn	Pro 240
His	Gln	Thr	Pro	Ala 245	Gln	Leu	Tyr	Thr	Leu 250	Gln	Pro	Lys	Leu	Pro 255	Ile
Thr	Val	Leu	Asn 260	Gly	Ala	Pro	Gly	Phe 265	Ile	Asn	Leu	Cys	Asp 270	Ala	Leu
Asn	Ala	Trp 275	Gln	Leu	Val	Lys	Glu 280	Leu	Lys	Glu	Ala	Leu 285	Gly	Ile	Pro
Ala	Ala	Ala	Ser	Phe	Lys	His	Val	Ser	Pro	Ala	Gly	Ala	Ala	Val	Gly

1244

290 295 300 Ile Pro Leu Ser Glu Asp Glu Ala Lys Val Cys Met Val Tyr Asp Leu 305 310 315 Tyr Lys Thr Leu Thr Pro Ile Ser Ala Ala Tyr Ala Arg Ala Arg Gly 330 Ala Asp Arg Met Ser Ser Phe Gly Asp Phe Val Ala Leu Ser Asp Val 345 Cys Asp Val Pro Thr Ala Lys Ile Ile Ser Arg Glu Val Ser Asp Gly 355 360 Ile Ile Ala Pro Gly Tyr Glu Glu Glu Ala Leu Thr Ile Leu Ser Lys 375 Lys Lys Asn Gly Asn Tyr Cys Val Leu Gln Met Asp Gln Ser Tyr Lys 390 395 Pro Asp Glu Asn Glu Val Arg Thr Leu Phe Gly Leu His Leu Ser Gln 405 410 Lys Arg Asn Asn Gly Val Val Asp Lys Ser Leu Phe Ser Asn Val Val 425 Thr Lys Asn Lys Asp Leu Pro Glu Ser Ala Leu Arg Asp Leu Ile Val 440 Ala Thr Ile Ala Val Lys Tyr Thr Gln Ser Asn Ser Val Cys Tyr Ala 450 455 Lys Asn Gly Gln Val Ile Gly Ile Gly Ala Gly Gln Gln Ser Arg Ile 475 His Cys Thr Arg Leu Ala Gly Asp Lys Ala Asn Tyr Trp Trp Leu Arg His His Pro Gln Val Leu Ser Met Lys Phe Lys Thr Gly Val Lys Arg 500 505 Ala Glu Ile Ser Asn Ala Ile Asp Gln Tyr Val Thr Gly Thr Ile Gly 520 Glu Asp Glu Asp Leu Ile Lys Trp Lys Ala Leu Phe Glu Glu Val Pro 535 Glu Leu Leu Thr Glu Ala Glu Lys Lys Glu Trp Val Glu Lys Leu Thr 545 550 Glu Val Ser Ile Ser Ser Asp Ala Phe Phe Pro Phe Arg Asp Asn Val

1245

565 570 575

Asp Arg Ala Lys Arg Ser Gly Val Ala Tyr Ile Ala Ala Pro Pro Val 580 585 590

Leu Leu Leu Thr Lys Leu 595

<210> 1219

<211> 209

<212> PRT

<213> Homo sapiens

<400> 1219

Tyr Thr Ala Ile Met Ser Ile Met Ser Tyr Asn Gly Gly Ala Val Met
1 5 10 15

Ala Met Lys Gly Lys Asn Cys Val Ala Ile Ala Ala Asp Arg Arg Phe 20 25 30

Gly Ile Gln Ala Gln Met Val Thr Thr Asp Phe Gln Lys Ile Phe Pro \$35\$ \$40\$ \$45\$

Met Gly Asp Arg Leu Tyr Ile Gly Leu Ala Gly Leu Ala Thr Asp Val 50 55 60

Gln Thr Val Ala Gln Arg Leu Lys Phe Arg Leu Asn Leu Tyr Glu Leu 65 70 75 80

Lys Glu Gly Arg Gln Ile Lys Pro Tyr Thr Leu Met Ser Met Val Ala $$85\$ 90 95

Asn Leu Leu Tyr Glu Lys Arg Phe Gly Pro Tyr Tyr Thr Glu Pro Val 100 105 110

Ile Ala Gly Leu Asp Pro Lys Thr Phe Lys Pro Phe Ile Cys Ser Leu 115 120 125

Asp Leu Ile Gly Cys Pro Met Val Thr Asp Asp Phe Val Val Ser Gly 130 135 140

Asn Met Asp Pro Asp His Leu Phe Glu Thr Ile Ser Gln Ala Met Leu 165 170 175

Asn Ala Val Asp Arg Asp Ala Val Ser Gly Met Gly Val Ile Val His 180 185 190

Ile Ile Glu Lys Asp Lys Ile Thr Thr Arg Thr Leu Lys Ala Arg Met
195 200 205

Asp

<210> 1220

<211> 140

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (51)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1220

Ile Ile Ser Ile Ile Ser Thr Ser Asn Lys Ile Lys Met Ser Glu Ala 1 5 10 15

Pro Arg Phe Phe Val Gly Pro Glu Asp Thr Glu Ile Asn Pro Gly Asn 20 25 30

Tyr Arg His Phe Phe His His Ala Asp Glu Asp Asp Glu Glu Glu Asp 35 40 45

Asp Ser Xaa Pro Glu Arg Gln Ile Val Val Gly Ile Cys Ser Met Xaa 50 55 60

Lys Lys Ser Lys Ser Lys Pro Met Lys Glu Ile Leu Xaa Arg Ile Ser 65 70 75 80

Leu Phe Lys Tyr Ile Thr Val Val Phe Glu Glu Glu Val Ile Leu
85 90 95

Asn Glu Pro Val Glu Asn Trp Pro Leu Cys Asp Cys Leu Ile Ser Phe 100 105 110

His Ser Lys Gly Phe Pro Leu Asp Lys Ala Val Ala Tyr Ala Lys Leu 115 120 125

Arg Asn Pro Phe Val Ile Asn Asp Leu Asn Met Gln 130 135 140

<210> 1221

<211> 45

<212> PRT

<213> Homo sapiens

<400> 1221

Gly Leu Met Glu Ile Glu Ile Thr Cys Lys Asp Ile Thr Val Phe Met
1 5 10 15

Ser Tyr Ile Leu Val Leu Glu Ile Val Glu Cys Met Ile Asp Asn Ile 20 25 30

Phe Leu Ile Phe Ile Phe Ser Ser Asn Thr Ser Thr Val $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

<210> 1222

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1222

Val Ala Tyr Ile Cys Tyr Ser Lys Phe Cys Lys Tyr Ala Asn Gln Leu 1 5 10 15

Tyr Arg Phe Ile Thr Ser Phe Leu Gly Phe Phe Trp Gly Arg Val Ile
20 25 30

Ile Leu Leu Lys Ile Thr Met Asn Thr Leu Thr Val Arg Ile Cys Gly 35 40 45

Lys Val Pro Leu Asn Ile Thr Lys Ile Ile Ser Leu Glu Gly Arg Asn 50 55 60

Asn His Ser Asn Glu Leu 65 70

<210> 1223

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1223

Phe Tyr Pro Ser Thr Tyr Leu Lys Ala Pro Ser Ser Leu Val Cys Gly $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Val Leu Glu Pro Val Ser Ser Phe Trp Arg Phe Lys Leu Asn Ser Asn 20 25 30

Asn Tyr Val Thr Gln Ser Met Trp Arg Lys Ser Glu Thr Ser His Gly 35 40 45

Asp Ala Gly Pro Arg Ala Arg Pro Ala Val Trp Pro Ala Leu Leu Thr 50 55 60

Ser Val Ser Arg Ser Phe Pro Ser His Glu Val Pro Ser Gly His Gly 65 70 75 80

Asp Glu Gly Arg Glu Gly Thr Gly

85

<210> 1224

<211> 298

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (279)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1224

Ala Thr Arg Arg Arg Ala Ala Glu Ala Gly Met Ala Ala Val Leu Gln
1 5 10 15

Arg Val Glu Arg Leu Ser Asn Arg Val Val Arg Val Leu Gly Cys Asn 20 25 30

Pro Gly Pro Met Thr Leu Gln Gly Thr Asn Thr Tyr Leu Val Gly Thr
35 40 45

Gly Pro Arg Arg Ile Leu Ile Asp Thr Gly Glu Pro Ala Ile Pro Glu 50 55 60

Tyr Ile Ser Cys Leu Lys Gln Ala Leu Thr Glu Phe Asn Thr Ala Ile 65 70 75 80

Gln Glu Ile Val Val Thr His Trp His Arg Asp His Ser Gly Gly Ile 85 90 95

Gly Asp Ile Cys Lys Ser Ile Asn Asn Asp Thr Thr Tyr Cys Ile Lys Lys Leu Pro Arg Asn Pro Gln Arg Glu Glu Ile Ile Gly Asn Gly Glu 115 120 Gln Gln Tyr Val Tyr Leu Lys Asp Gly Asp Val Ile Lys Thr Glu Gly 135 Ala Thr Leu Arg Val Leu Tyr Thr Pro Gly His Thr Asp Asp His Met 155 150 Ala Leu Leu Glu Glu Glu Asn Ala Ile Phe Ser Gly Asp Cys Ile 165 170 Leu Gly Glu Gly Thr Thr Val Phe Glu Asp Leu Tyr Asp Tyr Met Asn 180 185 Ser Leu Lys Glu Leu Leu Lys Ile Lys Ala Asp Ile Ile Tyr Pro Gly 200 His Gly Pro Val Ile His Asn Ala Glu Ala Lys Ile Gln Gln Tyr Ile 210 Ser His Arg Asn Ile Arg Glu Gln Gln Ile Leu Thr Leu Phe Arg Glu 230 235 Asn Phe Glu Lys Ser Phe Thr Val Met Glu Leu Val Lys Ile Ile Tyr 245 250 Lys Asn Thr Pro Glu Asn Leu His Glu Met Ala Lys His Asn Leu Leu 260 265 Leu His Leu Lys Lys Leu Xaa Lys Glu Gly Lys Ile Phe Ser Asn Thr 275 280 285 Asp Pro Asp Lys Lys Trp Lys Ala His Leu 295

<210> 1225

<211> 27

<212> PRT

<213> Homo sapiens

<400> 1225

Val Ser Gly Asp Tyr Gly His Pro Val Tyr Ile Val Gln Asp Gly Pro
1 5 10 15

Pro Gln Ser Pro Pro Asn Ile Tyr Tyr Lys Val 20 25

<210> 1226 <211> 380 <212> PRT <213> Homo sapiens <400> 1226 Glu Gln Glu Leu Asp Thr Leu Lys Arg Lys Ser Pro Ser Asp Leu Trp Lys Glu Asp Leu Ala Thr Phe Ile Glu Glu Leu Glu Ala Val Glu Ala 25 Lys Glu Lys Gln Asp Glu Gln Val Gly Leu Pro Gly Lys Val Gly Lys 40 Ala Lys Gly Lys Lys Thr Gln Met Ala Glu Val Leu Pro Ser Pro Arg Gly Gln Arg Val Ile Pro Arg Ile Thr Ile Glu Met Lys Ala Glu Ala 70 75 Glu Lys Lys Asn Lys Lys Lys Ile Lys Asn Glu Asn Thr Glu Gly Ser 90 Pro Gln Glu Asp Gly Val Glu Leu Glu Gly Leu Lys Gln Arg Leu Glu 100 105 Lys Lys Gln Lys Arg Glu Pro Gly Thr Lys Thr Lys Lys Gln Thr Thr 120 Leu Ala Phe Lys Pro Ile Lys Lys Gly Lys Lys Arg Asn Pro Trp Ser 135 Asp Ser Glu Ser Asp Arg Ser Ser Asp Glu Ser Asn Phe Asp Val Pro 155 145 150 Pro Arg Glu Thr Glu Pro Arg Arg Ala Ala Thr Lys Thr Lys Phe Thr 170 Met Asp Leu Asp Ser Asp Glu Asp Phe Ser Asp Phe Asp Glu Lys Thr Asp Asp Glu Asp Phe Val Pro Ser Asp Ala Ser Pro Pro Lys Thr Lys 195 200

Thr Ser Pro Lys Leu Ser Asn Lys Glu Leu Lys Pro Gln Lys Ser Val

1251

215 210 Val Ser Asp Leu Glu Ala Asp Asp Val Lys Gly Ser Val Pro Leu Ser 235 230 Ser Ser Pro Pro Ala Thr His Phe Pro Asp Glu Thr Glu Ile Thr Asn 250 245 Pro Val Pro Lys Lys Asn Val Thr Val Lys Lys Thr Ala Ala Lys Ser 265 260 Gln Ser Ser Thr Ser Thr Thr Gly Ala Lys Lys Arg Ala Ala Pro Lys 280 275 Gly Thr Lys Arg Asp Pro Ala Leu Asn Ser Gly Val Ser Gln Lys Pro 295 300 Asp Pro Ala Lys Thr Lys Asn Arg Arg Lys Arg Lys Pro Ser Thr Ser 315 310 Asp Asp Ser Asp Ser Asn Phe Glu Lys Ile Val Ser Lys Ala Val Thr 325 Ser Lys Lys Ser Lys Gly Glu Ser Asp Asp Phe His Met Asp Phe Asp 345 Ser Ala Val Ala Pro Arg Ala Lys Ser Val Arg Ala Lys Lys Pro Ile 360 Lys Tyr Leu Glu Glu Ser Asp Glu Asp Asp Leu Phe 375 370 <210> 1227 <211> 78 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (26) <223> Xaa equals any of the naturally occurring L-amino acids Phe Asn Ser Leu Lys Cys Leu Phe Gly Ile Met Ile Gly Asn Leu Asp

Glu Phe Arg Gly Lys Lys Leu Ser Ala Xaa Met Leu Arg Ala His Leu 20 25 30

1252

Ser Pro His Thr Pro Thr Glu Leu Thr Gly Leu Gln Cys Phe Ile Arg
35 40 45

Lys Phe Pro Ile Pro Leu Ser Cys Val Phe Met Leu Lys Ile Leu Leu 50 55 60

His Phe Ser Phe Glu Cys Gln Phe Leu Thr Ser Thr Ile Ser
65 70 75

<210> 1228

<211> 222

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (142)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1228

Ala Asn Glu Lys Val Ala Leu Gln Lys Ala Leu Leu Tyr Tyr Glu Ser 1 10 15

Ile His Gly Arg Pro Val Thr Lys Asn Glu Arg Gln Val Met Lys Pro $20 \hspace{1cm} 25 \hspace{1cm} 30$

Leu Tyr Asp Arg Tyr Arg Leu Val Lys Gln Ile Leu Ser Arg Ala Asn 35 40 45

Thr Ile Pro Ile Ile Gly Ser Pro Ser Ser Lys Arg Arg Ser Pro Leu 50 55 60

Leu Gln Pro Ile Ile Glu Gly Glu Thr Ala Ser Phe Phe Lys Glu Ile
65 70 75 80

Lys Glu Glu Glu Glu Gly Ser Glu Asp Asp Ser Asn Val Lys Pro Asp 85 90 95

Phe Met Val Thr Leu Lys Thr Asp Phe Ser Ala Arg Cys Phe Leu Asp 100 105 110

Gln Phe Glu Asp Asp Ala Asp Gly Phe Ile Ser Pro Met Asp Asp Lys
115 120 125

Ile Pro Ser Lys Cys Ser Gln Asp Thr Gly Leu Ser Asn Xaa His Ala 130 135 140

Ala Ser Ile Pro Glu Leu Leu Glu His Leu Gln Glu Met Arg Glu Glu 145 150 155 160

Lys Lys Arg Ile Arg Lys Lys Leu Arg Asp Phe Glu Asp Asn Phe Phe 165 170 175

Arg Gln Asn Gly Arg Asn Val Gln Lys Glu Asp Arg Thr Pro Met Ala 180 185 190

Glu Glu Tyr Ser Glu Tyr Lys His Ile Lys Ala Lys Leu Arg Leu Leu 195 200 205

Glu Val Leu Ile Ser Lys Arg Asp Thr Asp Ser Lys Ser Met 210 215 220

<210> 1229

<211> 220

<212> PRT

<213> Homo sapiens

<400> 1229

Lys Gly Ser Thr Leu Gly His Leu Cys Thr Ala Met Ala Gly Met Met

1 10 15

Lys Gly Ile Arg Trp Ser Cys Pro Ala Ile Ala Ser Ile Ser Gln Thr
20 25 30

Arg Ser Ser Gln Glu Lys Asp Ser Ser Ser Pro Pro Trp Asp Leu Arg

Arg Ala Ala Thr Glu Gly Glu Ala Pro Asp Ala Leu Cys Gln Ser Gln 50 55 60

Val Arg Gly Gln Ser Ser Pro Cys His Pro Trp Cys Arg Pro Ala Pro 65 70 75 80

Ser Ser Phe Met Pro Gly Pro Ala Gly Thr Pro Ala Thr Thr Glu Ser 85 90 95

Thr Arg Ser Ala Leu Cys Ser Trp Arg Arg His Ser Arg Val Glu Ser 100 105 110

Cys Pro Ser Leu Ser Leu Gly His Leu Gly Gly Glu Ser Gly Leu Arg 115 120 125

Ser Glu Leu Asp Pro Gly Asp Leu Gly Ser Phe Phe Leu Ala His Gln 130 135 140

Pro Cys Arg Pro His Leu Ser Gln Asn Pro Leu Cys Leu Gly Gly Ser 145 150 155 160

1254

Gly Ser Ala Leu Leu Cys Ser Arg Arg Leu Gly Ser Gly Gln His Gln 170 165 Val Gly Lys Trp Ser Pro Pro Ser Cys Phe Cys Arg Ile Leu Thr Val 185 Gly Leu Glu Glu Lys Ser Ile Asp Leu Ile Ser Pro Thr His Pro 200 Ser Phe Ser Phe Phe His His Ser Pro Pro Gln Leu 220 210 215 <210> 1230 <211> 183 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (12) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (19) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (30) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1230 Glu Leu Lys Arg Leu Thr Ile Gly Lys Asn Xaa Xaa Arg Leu Thr Gly Asn Arg Xaa Gly Ile Pro Gly Ser Thr His Ala Ser Glu Xaa Glu Val 25 20 Glu Glu Glu Gly Asp Val Asp Ser Asp Glu Glu Glu Glu Glu Asp Glu 40 Glu Ser Ser Glu Gly Leu Glu Ala Glu Asp Trp Ala Gln Gly Val 50 55 60

Val Glu Ala Gly Gly Ser Phe Gly Ala Tyr Gly Ala Gln Glu Glu Ala 65 70 75 80

Gln Cys Pro Thr Leu His Phe Leu Glu Gly Glu Asp Ser Asp Ser 85 90 95

Asp Ser Glu Glu Glu Asp Asp Glu Glu Glu Asp Asp Glu Asp 100 105 110

Asp Asp Asp Glu Glu Asp Gly Asp Glu Val Pro Val Pro Ser Phe 115 120 125

Gly Glu Ala Met Ala Tyr Phe Ala Met Val Lys Arg Tyr Leu Thr Ser 130 135 140

Phe Pro Ile Asp Asp Arg Val Gln Ser His Ile Leu His Leu Glu His 145 150 155 160

Asp Leu Val His Val Thr Arg Lys Asn His Ala Arg Gln Ala Gly Val 165 170 175

Arg Gly Leu Gly His Gln Ser 180

<210> 1231

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1231

Asn Leu Tyr Lys Leu Lys Leu Asn His Glu Leu Gln Lys Lys Ser Ile 1 5 10 15

Leu Pro Lys Leu Asp Val Thr Thr Leu Thr Ser Leu Lys Tyr Glu Val
20 25 30

Asp Cys Leu Lys Asp Ser Ala Tyr Ile Leu Val Cys Thr Phe Arg Asn 35 40 45

Ile Phe Leu Gly Lys Ser Thr Gln His Phe Leu 50 55

<210> 1232

<211> 135

<212> PRT

<213> Homo sapiens

1256

<400> 1232 Gly Ser Thr His Ala Ser Gly Pro Pro Gln Ala Pro Gln Leu Ile Tyr Gln Glu Tyr Val Asn Gln Pro Asp Val Arg Pro Gln Pro Pro Ser Pro 20 2.5 Arg Glu Gly Pro Leu Pro Ala Ala Arg Pro Ala Gly Ala Thr Leu Glu 40 Arg Ala Lys Thr Leu Ser Pro Gly Lys Asn Gly Val Val Lys Asp Val Phe Ala Phe Gly Gly Ala Val Glu Asn Pro Glu Tyr Leu Thr Pro Gln 75 Gly Gly Ala Ala Pro Gln Pro His Pro Pro Pro Ala Phe Ser Pro Ala 90 Phe Asp Asn Leu Tyr Tyr Trp Asp Gln Asp Pro Pro Glu Arg Gly Ala 105 100 Pro Pro Ser Thr Phe Lys Gly Thr Pro Thr Ala Glu Asn Pro Glu Tyr Leu Gly Leu Asp Val Pro Val 130 <210> 1233 <211> 134 <212> PRT <213> Homo sapiens <400> 1233 Arg Gly Glu Thr Arg Glu Met Ala Gly Asn Leu Leu Ser Gly Ala Gly 1 5 Arg Arg Leu Trp Asp Trp Val Pro Leu Ala Cys Arg Ser Phe Ser Leu 20 Gly Val Pro Arg Leu Ile Gly Ile Arg Leu Thr Leu Pro Pro Pro Lys 40 Val Val Asp Arg Trp Asn Glu Lys Arg Ala Met Phe Gly Val Tyr Asp 55

Asn Ile Gly Ile Leu Gly Asn Phe Glu Lys His Pro Lys Glu Leu Ile

75

70

Arg Gly Pro Ile Trp Leu Arg Gly Trp Lys Gly Asn Glu Leu Gln Arg 85 90 95

Cys Ile Arg Lys Arg Lys Met Val Gly Ser Arg Met Phe Ala Asp Asp 100 105 110

Leu His Asn Leu Asn Lys Arg Ile Arg Tyr Leu Tyr Lys His Phe Asn 115 120 125

Arg His Gly Lys Phe Arg 130

<210> 1234

<211> 282

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1234

Thr Gly Pro Glu Phe Pro Gly Xaa Pro Thr Arg Pro Arg Thr Ala Ala
1 5 10 15

Ala Xaa Ser Ala Arg Thr Arg Thr Arg Gly Ser Pro Arg Met Gly Glu
20 25 30

Phe Asn Glu Lys Lys Thr Thr Cys Gly Thr Val Cys Leu Lys Tyr Leu 35 40 45

Leu Phe Thr Tyr Asn Cys Cys Phe Trp Leu Ala Gly Leu Ala Val Met 50 55 60

Ala Val Gly Ile Trp Thr Leu Ala Leu Lys Ser Asp Tyr Ile Ser Leu 65 70 75 80

Leu Ala Ser Gly Thr Tyr Leu Ala Thr Ala Tyr Ile Leu Val Val Ala 85 90 95

Gly Thr Val Val Met Val Thr Gly Val Leu Gly Cys Cys Ala Thr Phe 100 105 110

1258

Lys Glu Arg Arg Asn Leu Leu Arg Leu Tyr Phe Ile Leu Leu Ile Ile Phe Leu Leu Glu Ile Ile Ala Gly Ile Leu Ala Tyr Ala Tyr Tyr 130 135 Gln Gln Leu Asn Thr Glu Leu Lys Glu Asn Leu Lys Asp Thr Met Thr 150 155 Lys Arg Tyr His Gln Pro Gly His Glu Ala Val Thr Ser Ala Val Asp 170 Gln Leu Gln Glu Phe His Cys Cys Gly Ser Asn Asn Ser Gln Asp 185 Trp Arg Asp Ser Glu Trp Ile Arg Ser Gln Glu Ala Gly Gly Arg Val 200 Val Pro Asp Ser Cys Cys Lys Thr Val Val Ala Leu Cys Gly Gln Arg 215 Asp His Ala Ser Asn Ile Tyr Lys Val Glu Gly Gly Cys Ile Thr Lys 225 230 235 Leu Glu Thr Phe Ile Gln Glu His Leu Arg Val Ile Gly Ala Val Gly 245 250 Ile Gly Ile Ala Cys Val Gln Val Phe Gly Met Ile Phe Thr Cys Cys 265 Leu Tyr Arg Ser Leu Lys Leu Glu His Tyr 275 280

<210> 1235

<211> 66

<212> PRT

<213> Homo sapiens

<400> 1235

Ala Glu Ile Gln Val Phe Gln Val Gly Leu Val Ser Trp Gly Leu Tyr

1 5 10 15

Asn Pro Cys Leu Gly Ser Ala Asp Lys Asn Ser Arg Lys Arg Ala Pro
20 25 30

Arg Ser Lys Val Pro Pro Pro Arg Asp Phe His Ile Asn Leu Phe Arg 35 40 45

1259

Met Gln Pro Trp Leu Arg Gln His Leu Gly Asp Val Leu Asn Phe Leu 50 60

Pro Leu 65

<210> 1236

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1236

Ala Arg Arg Arg Gly Gly Trp Ala Gly Gly Gly Gly Gly Thr Arg
1 5 10 15

Arg Ala Leu Gly Val Pro Val Ala Arg Arg Arg Met Trp Arg Ala 20 25 30

Glu Gly Lys Trp Leu Pro Lys Thr Ser Arg Lys Ser Val Ser Gln Ser 35 40 45

Val Phe Cys Gly Thr Ser Thr Tyr Cys Val Leu Asn Thr Val Pro Pro 50 55 60

Ile Glu Asp Asp His Gly Asn Ser Asn Ser Ser His Val Lys Ile Phe
65 70 75 80

Leu Pro Lys Lys Leu Leu Glu Cys Leu Pro Lys Cys Ser Ser Leu Pro
85 90 95

Lys Glu Arg His Arg Trp Asn Thr Asn Glu Arg Ser 100 105

<210> 1237

<211> 116

<212> PRT

<213> Homo sapiens

<400> 1237

Arg Gly Gly Ser Lys Gly Asn Glu Val Arg Pro Val Ala Gly Ser
1 5 10 15

Ala Glu Ser Ala Ala Leu Arg Leu Arg Ala Pro Leu Gln Gln Val Gln 20 25 30

Ala Gln Leu Ser Pro Leu Gln Asn Ile Ser Pro Trp Ile Leu Ala Val 35 40 45

1260

Leu Thr Leu Gln Ile Gln Ser Leu Ile Ser Cys Trp Ala Phe Trp Thr
50 55 60

Thr Trp Thr Gln Ser Cys Ser Ser Asn Ala Leu Pro Gln Ser Leu Pro 65 70 75 80

Ala Trp Arg Ser Ser Gln Arg Ser Thr Gln Lys Asp Pro Val Pro Tyr 85 90 95

Gln Pro Pro Phe Leu Cys Gln Trp Gly Arg His Gln Pro Ser Trp Lys 100 105 110

Pro Leu Met Asn 115

<210> 1238

<211> 311

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1238

Val Thr Ser Glu Gly Val Arg Val Arg Ser Ser Arg Gly Arg Ala Xaa 1 5 10 15

Gly Val Trp Arg Phe Glu Arg Asp Glu Asp Gly Thr Gly Ala Gly Cys 20 25 30

Gly Gln Trp Thr Arg Phe Cys Arg Glu Pro Lys Met Ala Val Asn Val 35 40 45

Tyr Ser Thr Ser Val Thr Ser Asp Asn Leu Ser Arg His Asp Met Leu 50 55 60

Ala Trp Ile Asn Glu Ser Leu Gln Leu Asn Leu Thr Lys Ile Glu Gln 65 70 75 80

Leu Cys Ser Gly Ala Ala Tyr Cys Gln Phe Met Asp Met Leu Phe Pro 85 90 95

Gly Ser Ile Ala Leu Lys Lys Val Lys Phe Gln Ala Lys Leu Glu His
100 105 110

Glu Tyr Ile Gln Asn Phe Lys Ile Leu Gln Ala Gly Phe Lys Arg Met

Gly Val Asp Lys Ile Ile Pro Val Asp Lys Leu Val Lys Gly Lys Phe Gln Asp Asn Phe Glu Phe Val Gln Trp Phe Lys Lys Phe Phe Asp Ala Asn Tyr Asp Gly Lys Asp Tyr Asp Pro Val Ala Ala Arg Gln Gly Gln Glu Thr Ala Val Ala Pro Ser Leu Val Ala Pro Ala Leu Asn Lys Pro Lys Lys Pro Leu Thr Ser Ser Ser Ala Ala Pro Gln Arg Pro Ile Ser Thr Gln Arg Thr Ala Ala Pro Lys Ala Gly Pro Gly Val Val Arg Lys Asn Pro Gly Val Gly Asn Gly Asp Asp Glu Ala Ala Glu Leu Met Gln Gln Val Asn Val Leu Lys Leu Thr Val Glu Asp Leu Glu Lys Glu Arg Asp Phe Tyr Phe Gly Lys Leu Arg Asn Ile Glu Leu Ile Cys Gln Glu Asn Glu Gly Glu Asn Asp Pro Val Leu Gln Arg Ile Val Asp Ile Leu Tyr Ala Thr Asp Glu Gly Phe Val Ile Pro Asp Glu Gly Pro Gln Glu Glu Glu Glu Tyr <210> 1239 <211> 345 <212> PRT

<213> Homo sapiens

<400> 1239

Ala Ala Arg Leu Ala Val Glu Met Lys Thr Asp Leu Leu Ile Val Leu

1 5 10 15

Ser Asp Val Glu Gly Leu Phe Asp Ser Pro Pro Gly Ser Asp Asp Ala

гуѕ	Leu	35	ASP	TTE	Pile	туг	40	GIÀ	ASP	GIII	GIII	45	vai	1111	FILE
Gly	Thr 50	Lys	Ser	Arg	Val	Gly 55	Met	Gly	Gly	Met	Glu 60	Ala	Lys	Val	Lys
Ala 65	Ala	Leu	Trp	Ala	Leu 70	Gln	Gly	Gly	Thr	Ser 75	Val	Val	Ile	Ala	Ası 80
Gly	Thr	His	Pro	Lys 85	Val	Ser	Gly	His	Val 90	Ile	Thr	Asp	Ile	Val 95	Glu
Gly	Lys	Lys	Val 100	Gly	Thr	Phe	Phe	Ser 105	Glu	Val	Lys	Pro	Ala 110	Gly	Pro
Thr	Val	Glu 115	Gln	Gln	Gly	Glu	Met 120	Ala	Arg	Ser	Gly	Gly 125	Arg	Met	Let
Ala	Thr 130	Leu	Glu	Pro	Glu	Gln 135	Arg	Ala	Glu	Ile	Ile 140	His	His	Leu	Ala
Asp 145	Leu	Leu	Thr	Asp	Gln 150	Arg	Asp	Glu	Ile	Leu 155	Leu	Ala	Asn	Lys	Lys
Asp	Leu	Glu	Glu	Ala 165	Glu	Gly	Arg	Leu	Ala 170	Ala	Pro	Leu	Leu	Lys 175	Arg
Leu	Ser	Leu	Ser 180	Thr	Ser	Lys	Leu	Asn 185	Ser	Leu	Ala	Ile	Gly 190	Leu	Arg
Gln	Ile	Ala 195	Ala	Ser	ser	Gln	Asp 200	ser	Val	Gly	Arg	Val 205	Leu	Arg	Arg
Thr	Arg 210	Ile	Ala	Lys	Asn	Leu 215	Glu	Leu	Glu	Gln	Val 220	Thr	Val	Pro	Ile
Gly 225	Val	Leu	Leu	Val	11e 230	Phe	Glu	Ser	Arg	Pro 235	Asp	Cys	Leu	Pro	Glr 240
Val	Ala	Ala	Leu	Ala 245	Ile	Ala	Ser	Gly	Asn 250	Gly	Leu	Leu	Leu	Lys 255	Gly
Gly	Lys	Glu	Ala 260	Ala	His	Ser	Asn	Arg 265	Ile	Leu	His	Leu	Leu 270	Thr	Glr
Glu	Ala	Leu 275	Ser	Ile	His	Gly	Val 280	Lys	Glu	Ala	Val	Gln 285	Leu	Val	Asn
Thr	Arg 290	Glu	Glu	Val	Glu	Asp 295	Leu	Cys	Arg	Leu	Asp 300	Lys	Met	Ile	Asp

1263

Leu Ile Ile Pro Arg Gly Ser Ser Gln Leu Val Arg Asp Ile Gln Lys 305 310 315 320

Ala Ala Lys Gly Ile Pro Val Met Gly His Ser Glu Gly Ile Cys Ala 325 330 335

His Val Cys Gly Phe Arg Gly Gln Cys 340 345

<210> 1240

<211> 87

<212> PRT

<213> Homo sapiens

<400> 1240

Gly Tyr Cys Phe Ile Ser Thr Ser Arg Thr Pro Lys Glu Thr Ile Trp
1 5 10 15

Val Lys Ala Thr Ser Thr Ala Leu Ala Leu His Arg Phe Leu Glu Phe 20 25 30

Leu Ser Phe Thr Phe Ser Leu Thr Gln His Cys Leu Leu Phe Val Phe 35 40 45

Val Ala Trp Phe Val Phe Phe Leu Pro Cys Ser Pro Asn Leu Cys Pro 50 55 60

Asn Ser Phe Gly Leu Met Gln Lys Tyr Leu Cys Gly Arg Glu Glu Leu 65 70 75 80

Phe Ser Trp Arg Ala Phe Arg

<210> 1241

<211> 196

<212> PRT

<213> Homo sapiens

<400> 1241

Arg Ala Gly Ser Pro Ala Ser Pro Ala His Val Ala Trp Pro Pro Ala 1 5 10 15

Pro Thr Trp Ser Arg Ala Leu Pro Arg Val Ala Pro Arg Ser Ser Ser 20 25 30

Arg Arg Gly Arg Arg Tyr Pro Glu Arg Ser Gln Arg Arg Arg Glu Val

1264

40 45 35 Ala Ala Thr Ala Met Pro Lys Asn Lys Gly Lys Gly Lys Asn Arg 50 55 Arg Arg Gly Lys Asn Glu Asn Glu Ser Glu Lys Arg Glu Leu Val Phe 70 Lys Glu Asp Gly Gln Glu Tyr Ala Gln Val Ile Lys Met Leu Gly Asn Gly Arg Leu Glu Ala Met Cys Phe Asp Gly Val Lys Arg Leu Cys His 100 Ile Arg Gly Lys Leu Arg Lys Lys Val Trp Ile Asn Thr Ser Asp Ile 120 Ile Leu Val Gly Leu Arg Asp Tyr Gln Asp Asn Lys Ala Asp Val Ile 135 Leu Lys Tyr Asn Ala Asp Glu Ala Arg Ser Leu Lys Ala Tyr Gly Glu 150 Leu Pro Glu His Ala Lys Ile Asn Glu Thr Asp Thr Phe Gly Pro Gly 165 170 Asp Asp Asp Glu Ile Gln Phe Asp Asp Ile Gly Asp Asp Asp Glu Asp 185 Ile Asp Asp Ile 195 <210> 1242 <211> 218 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

<223> Xaa equals any of the naturally occurring L-amino acids

Ala Val Xaa Phe Lys Asp Xaa Ile Tyr Glu Ile Phe Gln Lys Leu Asn

<222> (7)

<400> 1242

1265

10 15 1 5 Thr Ser Ile Gln Val Val Leu Leu Ser Ala Thr Met Pro Thr Asp Val 25 20 Leu Glu Val Thr Lys Lys Phe Met Arg Asp Pro Ile Arg Ile Leu Val Lys Lys Glu Glu Leu Thr Leu Glu Gly Ile Lys Gln Phe Tyr Ile Asn Val Glu Arg Glu Glu Trp Lys Leu Asp Thr Leu Cys Asp Leu Tyr Glu 70 Thr Leu Thr Ile Thr Gln Ala Val Ile Phe Leu Asn Thr Arg Arg Lys 90 Val Asp Trp Leu Thr Glu Lys Met His Ala Arg Asp Phe Thr Val Ser 100 105 Ala Leu His Gly Asp Met Asp Gln Lys Glu Arg Asp Val Ile Met Arg 125 115 Glu Phe Arg Ser Gly Ser Ser Arg Val Leu Ile Thr Thr Asp Leu Leu 135 Ala Arg Gly Ile Asp Val Gln Gln Val Ser Leu Val Ile Asn Tyr Asp 150 155 Leu Pro Thr Asn Arg Glu Asn Tyr Ile His Arg Ile Gly Arg Gly Gly 165 170 Arg Phe Gly Arg Lys Gly Val Ala Ile Asn Phe Val Thr Glu Glu Asp 185 Lys Arg Ile Leu Arg Asp Ile Glu Thr Phe Tyr Asn Thr Thr Val Glu Glu Met Pro Met Asn Val Ala Asp Leu Ile 215 210

<210> 1243

<211> 173

<212> PRT

<213> Homo sapiens

<400> 1243

Leu Asp Gly Ser Ala Arg Ala Glu Leu Ala Leu Ser Val Ala Val Asn 1 5 10 15

1266

Val Ala Pro Gly Arg Leu Cys Ala Gly Arg Tyr Ser Ser Asp Val Gln 25 Glu Met Ile Leu Ser Ser Ala Thr Ala Asp Arg Ile Pro Ile Ala Val 35 40 Ser Gly Val Arg Gly Met Gly Phe Leu Met Arg His His Ile Glu Thr 55 Gly Gly Gln Leu Pro Ala Lys Leu Ser Ser Leu Phe Val Lys Cys 70 75 Leu Gln Asn Pro Ser Ser Asp Ile Arg Leu Val Ala Glu Lys Met Ile Trp Trp Ala Asn Lys Asp Pro Leu Pro Pro Leu Asp Pro Gln Ala Ile 105 Lys Pro Ile Leu Lys Ala Leu Leu Asp Asn Thr Lys Asp Lys Asn Thr 120 Val Val Arg Ala Tyr Ser Asp Gln Ala Ile Val Asn Leu Leu Lys Met 130 135 Arg Gln Gly Glu Glu Val Phe Gln Ser Leu Ser Lys Ile Leu Asp Val 145 150 155 Ala Ser Leu Glu Val Leu Asn Glu Val Asn Arg Ser Pro 165 <210> 1244 <211> 222 <212> PRT

1267

Xaa Gln Ala Thr Ala Glu Ala Asn Asn Leu Ala Ala Val Ala Thr Ala 25 Lys Asp Thr Tyr Asn Lys Lys Met Glu Glu Ile Cys Gly Gly Asp Lys 45 35 40 Pro Phe Leu Ala Pro Asn Asp Leu Gln Thr Lys His Leu Gln Leu Lys 55 Glu Glu Ser Val Lys Leu Phe Xaa Gly Val Lys Lys Met Gly Glu Glu Phe Ser Arg Arg Tyr Leu Gln Gln Leu Glu Ser Glu Ile Asp Glu 85 Leu Tyr Ile Gln Tyr Ile Lys His Asn Asp Ser Lys Asn Ile Phe His 105 100 Ala Ala Arg Thr Pro Ala Thr Leu Phe Val Val Ile Phe Ile Thr Tyr 120 Val Ile Ala Gly Val Thr Gly Phe Ile Gly Leu Asp Ile Ile Ala Ser 130 135 Leu Cys Asn Met Ile Met Gly Leu Thr Leu Ile Thr Leu Cys Thr Trp 150 155 Ala Tyr Ile Arg Tyr Ser Gly Glu Tyr Arg Glu Leu Gly Ala Val Ile 165 170 Asp Gln Val Ala Ala Ala Leu Trp Asp Gln Ala Leu Tyr Lys Leu Tyr 185 180 Ser Ala Ala Ala Thr His Arg His Leu Tyr His Gln Ala Phe Pro Thr 195 200 Pro Lys Ser Glu Ser Thr Glu Gln Ser Glu Lys Lys Met

<210> 1245

<211> 278

<212> PRT

<213> Homo sapiens

<400> 1245

Ser Ala Glu Asp Val Glu Phe Gln Lys Glu Val Ala Gln Val Arg Lys
1 5 10 15

1268

Arg	Ile	Thr	Gln 20	Arg	Lys	Lys	Gln	Glu 25	Gln	Leu	Thr	Pro	Gly 30	Val	Val
Tyr	Val	Arg 35	His	Leu	Pro	Asn	Leu 40	Leu	Asp	Glu	Thr	Gln 45	Ile	Phe	Ser
Tyr	Phe 50	Ser	Gln	Phe	Gly	Thr 55	Val	Thr	Arg	Phe	Arg 60	Leu	Ser	Arg	Ser
Lys 65	Arg	Thr	Gly	Asn	Ser 70	Lys	Gly	Tyr	Ala	Phe 75	Val	Glu	Phe	Glu	Ser 80
Glu	Asp	Val	Ala	Lys 85	Ile	Val	Ala	Glu	Thr 90	Met	Asn	Asn	Tyr	Leu 95	Phe
Gly	Glu	Arg	Leu 100	Leu	Glu	Cys	His	Phe 105	Met	Pro	Pro	Glu	Lys 110	Val	His
Lys	Glu	Leu 115	Phe	Lys	Asp	Trp	Asn 120	Ile	Pro	Phe	Lys	Gln 125	Pro	Ser	Tyr
Pro	Ser 130	Val	Lys	Arg	Tyr	Asn 135	Arg	Asn	Arg	Thr	Leu 140	Thr	Gln	Lys	Leu
Arg 145	Met	Glu	Glu	Arg	Phe 150	Lys	Lys	Lys	Glu	Arg 155	Leu	Leu	Arg	Lys	Lys 160
		_	_	Gly 165				_	170					175	
Lys	Thr	Glu	Ser 180	Ile	Ser	Lys	Thr	Asn 185	Arg	Gln	Thr	Ser	Thr 190	Lys	Gly
		195		Lys			200					205			
	210	_		Val		215					220				
225				Arg	230					235					240
Asp	Lys	Asp	Asp	Glu 245	Ile	Val	Phe	Lys	Gln 250	Pro	Ile	Ser	Cys	Val 255	Lys
Glu	Glu	Ile	Gln 260	Glu	Thr	Gln	Thr	Pro 265	Thr	His	Ser	Arg	Lys 270	Lys	Arg
				_											

Arg Arg Ser Ser Asn Gln 275

1269

<210> 1246 <211> 121 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (100) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1246 Ser Pro Pro Leu Ser Leu Ile Leu Leu Ser Pro Ile Lys Ala Lys 5 Tyr Gly Leu Thr Thr Ser Pro Lys Ser Val Leu Arg Pro Ser Leu Cys 20 25 Leu Cys Ala Leu Leu Gly Val Ser Gln Arg Ser Gly Gln Asp Cys Ala 40 Gly Pro Ala Ser Pro Cys Ala Ser Gln Glu His Arg Gln Gly Val Leu 50 Val Ala Val Ala Gly His Leu Ser Pro Ser Ser Leu Leu Asn Val Leu 70 75 Thr Ala Arg Gly Asn Gly Val Ser Phe Pro Thr Lys Lys Pro Leu Leu 90 Tyr Ile Phe Xaa Leu Gln Ser His Arg Leu Gln Thr Thr Leu Leu Phe 110 100 105 Phe Met Asp Phe Ser Ala His Phe Arg 115 <210> 1247 <211> 36 <212> PRT <213> Homo sapiens <400> 1247 Ile Phe His Arg Val Leu Leu Cys Asp Leu Asn Phe Ser Leu Gly Pro 10 5

Ala Ser Asp Ile Val Gly Gly Leu Ser Trp Phe Gln Glu Ile Arg Leu 25

1270

Ala Phe Ser Ser 35

<210> 1248

<211> 184

<212> PRT

<213> Homo sapiens

<400> 1248

Trp Ile Pro Arg Ala Cys Arg Glu Phe Gly Thr Arg Phe Gly Gly Val 1 5 10 15

Thr Arg Gly Phe Asn Met Arg Ile Glu Lys Cys Tyr Phe Cys Ser Gly 20 25 30

Pro Ile Tyr Pro Gly His Gly Met Met Phe Val Arg Asn Asp Cys Lys 35 40 45

Val Phe Arg Phe Cys Lys Ser Lys Cys His Lys Asn Phe Lys Lys 50 55 60

Arg Asn Pro Arg Lys Val Arg Trp Thr Lys Ala Phe Arg Lys Ala Ala 65 70 75 80

Gly Lys Glu Leu Thr Val Asp Asn Ser Phe Glu Phe Glu Lys Arg Arg

85

90

95

Asn Glu Pro Ile Lys Tyr Gln Arg Glu Leu Trp Asn Lys Thr Ile Asp 100 105 110

Ala Met Lys Arg Val Glu Glu Ile Lys Gln Lys Arg Gln Ala Lys Phe 115 120 125

Ile Met Asn Arg Leu Lys Lys Asn Lys Glu Leu Gln Lys Val Gln Asp 130 135 140

Gly Lys Gly Lys Gln Leu Glu Glu Lys Met Val Gln Gln Leu Gln Glu 165 170 175

Asp Val Asp Met Glu Asp Ala Pro 180

<210> 1249

<211> 188

1271

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (104)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1249

Gly Cys Pro Ala His Ser Pro Gly Ser Ala Lys Arg Trp Thr Gln Ala 1 5 10 15

Ala Met Ser Arg Pro Arg Met Arg Leu Val Val Thr Ala Asp Asp Phe 20 25 30

Gly Tyr Cys Pro Arg Arg Asp Glu Gly Ile Val Glu Ala Phe Leu Ala 35 40 45

Gly Ala Val Thr Ser Val Ser Leu Leu Val Asn Gly Ala Ala Thr Glu 50 55 60

Ser Ala Ala Glu Leu Ala Arg Arg His Ser Ile Pro Thr Gly Leu His 65 70 75 80

Ala Asn Leu Ser Glu Gly Arg Pro Val Gly Pro Ala Arg Arg Gly Ala 85 90 95

Ser Ser Leu Leu Gly Pro Glu Xaa Phe Phe Leu Gly Lys Met Gly Phe 100 105 110

Arg Glu Ala Val Ala Ala Gly Asp Val Asp Leu Pro Gln Val Arg Ser 115 120 125

Arg Ser Tyr Arg Arg Met Leu Ala Arg Thr Pro Arg Ala Pro Pro Gly
130 135 140

Gly Thr Val Arg Pro Leu Glu Leu Ala Val Asp Asp Phe Arg Ile Gln 145 150 155 160

Thr Leu Glu Pro Ser His Gly Ser Thr Arg Arg Val Ser Ser Ala Ala 165 170 175

Thr Pro Gly Arg Ser Arg Cys Leu Ser Leu Ala Leu 180 185

<210> 1250

<211> 201

<212> PRT

<213> Homo sapiens

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<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1250
Arg Lys Asn Leu Glu Ile Tyr Glu Ala Val Thr Ser Pro Gln Gly Pro
Ala Met Thr Trp Ser Met Phe Ala Val Gly Trp Met Glu Leu Lys Asp
             20
Ala Cys Gly Xaa Arg Gly Leu Leu Asp Arg Ser Phe Ala Asn Met Ala
                             40
Glu Pro Phe Lys Val Trp Thr Glu Asn Ala Asp Gly Ser Gly Ala Val
     50
                         55
Asn Phe Leu Thr Gly Met Gly Gly Phe Leu Gln Ala Val Val Phe Gly
 65
Cys Thr Gly Phe Arg Val Ser Val Ser Gly Ile Phe Tyr Gln Gly Xaa
Xaa Leu Asn Phe Xaa Phe Ser Glu Asp Ser Val Thr Val Glu Val Thr
            100
                                105
Ala Arg Ala Gly Pro Trp Ala Pro His Leu Glu Ala Glu Leu Trp Pro
                            120
        115
Ser Gln Ser Arg Leu Ser Leu Leu Pro Gly His Lys Val Ser Phe Pro
                       135
Arg Ser Ala Gly Arg Ile Gln Met Ser Pro Pro Lys Leu Pro Gly Ser
145
                    150
                                       155
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PCT/US00/05882

Ser Ser Ser Glu Phe Pro Gly Arg Thr Phe Ser Asp Val Arg Asp Pro 165 170 175

Leu Gln Ser Pro Leu Trp Val Thr Leu Gly Ser Ser Ser Pro Thr Glu
180 185 190

Ser Leu Thr Val Asp Pro Ala Ser Glu 195 200

<210> 1251

WO 00/55350

<211> 266

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1251

Ser Val Gly Ser Val Ala Ala Ala Thr Arg Thr Gly Pro Val Ser Xaa 1 5 10 15

Lys Lys Phe Arg Glu Ala Ser Trp Arg Phe Thr Phe Tyr Leu Ile Ala 20 25 30

Phe Ile Ala Gly Met Ala Val Ile Val Asp Lys Pro Trp Phe Tyr Asp 35 40 45

Met Lys Lys Val Trp Glu Gly Tyr Pro Ile Gln Ser Thr Ile Pro Ser 50 60

Gln Tyr Trp Tyr Tyr Met Ile Glu Leu Ser Phe Tyr Trp Ser Leu Leu 65 70 75 80

Phe Ser Ile Ala Ser Asp Val Lys Arg Lys Asp Phe Lys Glu Gln Ile 85 90 95

Ile His His Val Ala Thr Ile Ile Leu Ile Ser Phe Ser Trp Phe Ala 100 105 110

Asn Tyr Ile Arg Ala Gly Thr Leu Ile Met Ala Leu His Asp Ser Ser 115 120 125

Asp Tyr Leu Leu Glu Ser Ala Lys Met Phe Asn Tyr Ala Gly Trp Lys 130 135 140

Asn Thr Cys Asn Asn Ile Phe Ile Val Phe Ala Ile Val Phe Ile Ile

1274

155 160 145 150 Thr Arg Leu Val Ile Leu Pro Phe Trp Ile Leu His Cys Thr Leu Val 170 Tyr Pro Leu Glu Leu Tyr Pro Ala Phe Phe Gly Tyr Tyr Phe Phe Asn 185 Ser Met Met Gly Val Leu Gln Leu Leu His Ile Phe Trp Ala Tyr Leu 200 Ile Leu Arg Met Ala His Lys Phe Ile Thr Gly Lys Leu Val Glu Asp 215 Glu Arg Ser Asp Arg Glu Glu Thr Glu Ser Ser Glu Gly Glu Glu Ala 230 235 Ala Ala Gly Gly Ala Lys Ser Arg Pro Leu Ala Asn Gly His Pro 250 Ile Leu Asn Asn Asn His Arg Lys Asn Asp 265 260 <210> 1252 <211> 163 <212> PRT <213> Homo sapiens <400> 1252 Lys Met Gly Thr Asn Lys Cys Ala Ser Gln Ala Gly Met Thr Ala Tyr Gly Thr Arg Arg His Leu Tyr Asp Pro Lys Met Gln Thr Asp Lys Pro Phe Asp Gln Thr Thr Ile Ser Leu Gln Met Gly Thr Asn Lys Gly Ala 40 Ser Gln Ala Gly Met Leu Ala Pro Gly Thr Arg Arg Asp Ile Tyr Asp 50 Gln Lys Leu Thr Leu Gln Pro Val Asp Asn Ser Thr Ile Ser Leu Gln 75 65 Met Gly Thr Asn Lys Val Ala Ser Gln Lys Gly Met Ser Val Tyr Gly Leu Gly Arg Gln Val Tyr Asp Pro Lys Tyr Cys Ala Ala Pro Thr Glu 100 105

1275

Pro Val Ile His Asn Gly Ser Gln Gly Thr Gly Thr Asn Gly Ser Glu 115 120 125

Ile Ser Asp Ser Asp Tyr Gln Ala Glu Tyr Pro Asp Glu Tyr His Gly 130 135 140

Glu Tyr Gln Asp Asp Tyr Pro Arg Asp Tyr Gln Tyr Ser Asp Gln Gly
145 150 155 160

Ile Asp Tyr

<210> 1253

<211> 298

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (109)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1253

Leu Glu Glu Thr Pro Cys Leu Arg Thr Ala Val Ala Cys Glu Gln Arg
1 5 10 15

Asp Pro Gly Thr Glu Ser Gln Pro Arg Arg Cys Cys Arg Arg Arg Arg 20 25 30

Pro Glu Thr Ala Glu Pro Val Arg Pro Pro Pro Pro Pro Thr Pro Asp 35 40 45

Thr Glu His Pro Val Met Asp Lys Asn Glu Leu Val Gln Lys Ala Lys 50 55 60

Leu Ala Glu Gln Ala Glu Arg Tyr Asp Asp Met Ala Ala Cys Met Lys 65 70 75 80

Ser Val Thr Glu Gln Gly Ala Glu Leu Ser Asn Glu Glu Arg Asn Leu 85 90 95

Leu Ser Val Ala Tyr Lys Asn Val Val Gly Ala Arg Xaa Ser Ser Trp

Arg Val Val Ser Ser Ile Glu Gln Lys Thr Glu Gly Ala Glu Lys Lys 115 120 125

Gln Gln Met Ala Arg Glu Tyr Arg Glu Lys Ile Glu Thr Glu Leu Arg

1276

140 135 130 Asp Ile Cys Asn Asp Val Leu Ser Leu Leu Glu Lys Phe Leu Ile Pro 155 150 145 Asn Ala Ser Gln Ala Glu Ser Lys Val Phe Tyr Leu Lys Met Lys Gly 170 165 Asp Tyr Tyr Arg Tyr Leu Ala Glu Val Ala Ala Gly Asp Asp Lys Lys 185 180 Gly Ile Val Asp Gln Ser Gln Gln Ala Tyr Gln Glu Ala Phe Glu Ile 200 Ser Lys Lys Glu Met Gln Pro Thr His Pro Ile Arg Leu Gly Leu Ala 215 Leu Asn Phe Ser Val Phe Tyr Tyr Glu Ile Leu Asn Ser Pro Glu Lys 235 230 Ala Cys Ser Leu Ala Lys Thr Ala Phe Asp Glu Ala Ile Ala Glu Leu 250 245 Asp Thr Leu Ser Glu Glu Ser Tyr Lys Asp Ser Thr Leu Ile Met Gln 265 260 Leu Leu Arg Asp Asn Leu Thr Leu Trp Thr Ser Asp Thr Gln Gly Asp 280 Glu Ala Glu Ala Gly Glu Gly Glu Asn 290 295 <210> 1254 <211> 173 <212> PRT <213> Homo sapiens <400> 1254 Ser Pro Ala Arg Pro Leu Ile Arg Ser Asp Lys Met Lys Glu Thr Ile Met Asn Gln Glu Lys Leu Ala Lys Leu Gln Ala Gln Val Arg Ile Gly 25 20 Gly Lys Gly Thr Ala Arg Arg Lys Lys Lys Val Val His Arg Thr Ala

Thr Ala Asp Asp Lys Lys Leu Gln Phe Ser Leu Lys Lys Leu Gly Val

55

50

Asn Asn Ile Ser Gly Ile Glu Glu Val Asn Met Phe Thr Asn Gln Gly 65 70 75 80

Thr Val Ile His Phe Asn Asn Pro Lys Val Gln Ala Ser Leu Ala Ala 85 90 95

Asn Thr Phe Thr Ile Thr Gly His Ala Glu Thr Lys Gln Leu Thr Glu 100 105 110

Met Leu Pro Ser Ile Leu Asn Gln Leu Gly Ala Asp Ser Leu Thr Ser 115 120 125

Leu Arg Arg Leu Ala Glu Ala Leu Pro Lys Gln Ser Val Asp Gly Lys 130 135 140

Val Glu Asn Phe Asp Glu Ala Ser Lys Asn Glu Ala Asn 165 170

<210> 1255

<211> 66

<212> PRT

<213> Homo sapiens

<400> 1255

Leu Cys Cys Pro Phe His Ile Lys Glu Leu Leu Thr Thr Lys Ala Ala 1 5 10 15

Pro Ala Phe Pro Ile Cys Leu Ser Ile Trp Leu Ala Gly Lys Glu Arg 20 25 30

Thr Cys Met Leu Val Lys Glu Glu Val Gly Trp Lys Lys Trp Gly Gly 35 40 45

Thr Thr Val Lys Ser Arg Val Lys Pro Ser Trp Pro Lys Val Ser Cys
50 55 60

Arg Leu 65

<210> 1256

<211> 389

<212> PRT

<213> Homo sapiens

1278

<400> 1256

Ala Glu Ala Gly Pro Gly Ala Arg Ala Ala Ala Met Ala Ile Lys Phe Leu Glu Val Ile Lys Pro Phe Cys Val Ile Leu Pro Glu Ile Gln 25 Lys Pro Glu Arg Lys Ile Gln Phe Lys Glu Lys Val Leu Trp Thr Ala Ile Thr Leu Phe Ile Phe Leu Val Cys Cys Gln Ile Pro Leu Phe Gly 50 Ile Met Ser Ser Asp Ser Ala Asp Pro Phe Tyr Trp Met Arg Val Ile 75 Leu Ala Ser Asn Arg Gly Thr Leu Met Glu Leu Gly Ile Ser Pro Ile 90 Val Thr Ser Gly Leu Ile Met Gln Leu Leu Ala Gly Ala Lys Ile Ile 105 Glu Val Gly Asp Thr Pro Lys Asp Arg Ala Leu Phe Asn Gly Ala Gln 120 Lys Leu Phe Gly Met Ile Ile Thr Ile Gly Gln Ser Ile Val Tyr Val 135 Met Thr Gly Met Tyr Gly Asp Pro Ser Glu Met Gly Ala Gly Ile Cys 155 145 150 Leu Leu Ile Thr Ile Gln Leu Phe Val Ala Gly Leu Ile Val Leu Leu 170 Leu Asp Glu Leu Leu Gln Lys Gly Tyr Gly Leu Gly Ser Gly Ile Ser 185 Leu Phe Ile Ala Thr Asn Ile Cys Glu Thr Ile Val Trp Lys Ala Phe 200 195 Ser Pro Thr Thr Val Asn Thr Gly Arg Gly Met Glu Phe Glu Gly Ala 215 Ile Ile Ala Leu Phe His Leu Leu Ala Thr Arg Thr Asp Lys Val Arg 230 235 Ala Leu Arg Glu Ala Phe Tyr Arg Gln Asn Leu Pro Asn Leu Met Asn Leu Ile Ala Thr Ile Phe Val Phe Ala Val Val Ile Tyr Phe Gln Gly

1279

265 270 260 Phe Arg Val Asp Leu Pro Ile Lys Ser Ala Arg Tyr Arg Gly Gln Tyr 275 280 Asn Thr Tyr Pro Ile Lys Leu Phe Tyr Thr Ser Asn Ile Pro Ile Ile 295 Leu Gln Ser Ala Leu Val Ser Asn Leu Tyr Val Ile Ser Gln Met Leu 310 315 Ser Ala Arg Phe Ser Gly Asn Leu Leu Val Ser Leu Leu Gly Thr Trp 330 325 Ser Asp Thr Ser Ser Gly Gly Pro Ala Arg Ala Tyr Pro Val Gly Gly 340 345 Leu Cys Tyr Tyr Leu Ser Pro Pro Trp Ser Met Asn Ser Thr Gly Thr 360 Ser Pro Gln Pro Arg Pro Leu Val Gly Cys Ala Ser Gly Pro Ser Arg 370 375 380 Ser Trp Leu Thr Ser 385 <210> 1257 <211> 191 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1257 Gly Xaa Pro Ser Ser Ser Arg Ala His Ser Pro Met Ile Ala Val Gly 10 Ser Asp Asp Ser Ser Pro Asn Ala Met Ala Lys Val Gln Ile Phe Glu 20 Tyr Asn Glu Asn Thr Arg Lys Tyr Ala Lys Ala Glu Thr Leu Met Thr 40 35 Val Thr Asp Pro Val His Asp Ile Ala Phe Ala Pro Asn Leu Gly Arg 55

Ser Phe His Ile Leu Ala Ile Ala Thr Lys Asp Val Arg Ile Phe Thr 65 Leu Lys Pro Val Arg Lys Glu Leu Thr Ser Ser Gly Gly Pro Thr Lys 85 Phe Glu Ile His Ile Val Ala Gln Phe Asp Asn His Asn Ser Gln Val 105 Trp Arg Val Ser Trp Asn Ile Thr Gly Thr Val Leu Ala Ser Ser Gly 120 115 Asp Asp Gly Cys Val Arg Leu Trp Lys Ala Asn Tyr Met Asp Asn Trp 135 Lys Cys Thr Gly Ile Leu Lys Gly Asn Gly Ser Pro Val Asn Gly Ser 150 Ser Gln Gln Gly Thr Ser Asn Pro Ser Leu Gly Ser Asn Ile Pro Ser 170 165 Leu Gln Asn Ser Leu Asn Gly Ser Ser Ala Gly Arg Lys His Ser 185

<210> 1258 <211> 458 <212> PRT <213> Homo sapiens

<400> 1258

Pro Gly Ala Arg His Gly Ser Ala Ser Ala Pro Thr Leu Phe Pro Leu

1 5 10 15

Val Ser Cys Glu Asn Ser Pro Ser Asp Thr Ser Ser Val Ala Val Gly
20 25 30

Cys Leu Ala Gln Asp Phe Leu Pro Asp Ser Ile Thr Phe Ser Trp Lys
35 40 45

Tyr Lys Asn Asn Ser Asp Ile Ser Ser Thr Arg Gly Phe Pro Ser Val

Leu Arg Gly Gly Lys Tyr Ala Ala Thr Ser Gln Val Leu Leu Pro Ser 65 70 75 80

Lys Asp Val Met Gln Gly Thr Asp Glu His Val Val Cys Lys Val Gln 85 90 95

His Pro Asn Gly Asn Lys Glu Lys Asn Val Pro Leu Pro Val Ile Ala

Glu Leu Pro Pro Lys Val Ser Val Phe Val Pro Pro Arg Asp Gly Phe Phe Gly Asn Pro Arg Lys Ser Lys Leu Ile Cys Gln Ala Thr Gly Phe Ser Pro Arg Gln Ile Gln Val Ser Trp Leu Arg Glu Gly Lys Gln Val Gly Ser Gly Val Thr Thr Asp Gln Val Gln Ala Glu Ala Lys Glu Ser Gly Pro Thr Thr Tyr Lys Val Thr Ser Thr Leu Thr Ile Lys Glu Ser Asp Trp Leu Ser Gln Ser Met Phe Thr Cys Arg Val Asp His Arg Gly Leu Thr Phe Gln Gln Asn Ala Ser Ser Met Cys Val Pro Asp Gln Asp Thr Ala Ile Arg Val Phe Ala Ile Pro Pro Ser Phe Ala Ser Ile Phe Leu Thr Lys Ser Thr Lys Leu Thr Cys Leu Val Thr Asp Leu Thr Thr Tyr Asp Ser Val Thr Ile Ser Trp Thr Arg Gln Asn Gly Glu Ala Val Lys Thr His Thr Asn Ile Ser Glu Ser His Pro Asn Ala Thr Phe Ser Ala Val Gly Glu Ala Ser Ile Cys Glu Asp Asp Trp Asn Ser Gly Glu Arg Phe Thr Cys Thr Val Thr His Thr Asp Leu Pro Ser Pro Leu Lys Gln Thr Ile Ser Arg Pro Lys Gly Val Ala Leu His Arg Pro Asp Val Tyr Leu Leu Pro Pro Ala Arg Glu Gln Leu Asn Leu Arg Glu Ser Ala Thr Ile Thr Cys Leu Val Thr Gly Phe Ser Pro Ala Asp Val Phe Val Gln Trp Met Gln Arg Gly Gln Pro Leu Ser Pro Glu Lys Tyr Val Thr

1282

370 375 380 Ser Ala Pro Met Pro Glu Pro Gln Ala Pro Gly Arg Tyr Phe Ala His 385 390 395 Ser Ile Leu Thr Val Ser Glu Glu Glu Trp Asn Thr Gly Glu Thr Tyr 410 405 Thr Cys Val Val Ala His Glu Ala Leu Pro Asn Arg Val Thr Glu Arg 425 Thr Val Asp Lys Ser Thr Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu 440 445 435 Val Met Ser Asp Thr Ala Gly Thr Cys Tyr 455 450 <210> 1259 <211> 247 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (25) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1259 Ala Gly Pro Ala Pro Glu Glu Pro Arg Gly Gly Ala Ala Ala Arg Trp 10 Asp Cys Gln Pro Cys Gln Ala Ala Xaa Val Val Glu Asn Ser Ala Gln 20 Arg Val Ile His Leu Ala Gly Gln Trp Glu Lys His Arg Val Pro Leu Leu Ala Glu Tyr Arg His Leu Arg Lys Leu Gln Asp Cys Arg Glu Leu 55 Glu Ser Ser Arg Arg Leu Ala Glu Ile Gln Glu Leu His Gln Ser Val 65 70 Arg Ala Ala Glu Glu Ala Arg Arg Lys Glu Glu Val Tyr Lys Gln 90 Leu Met Ser Glu Leu Glu Thr Leu Pro Arg Asp Val Ser Arg Leu Ala

105

Tyr Thr Gln Arg Ile Leu Glu Ile Val Gly Asn Ile Arg Lys Gln Lys 115 120 125

Glu Glu Ile Thr Lys Ile Leu Ser Asp Thr Lys Glu Leu Gln Lys Glu 130 135 140

Ile Asn Ser Leu Ser Gly Lys Leu Asp Arg Thr Phe Ala Val Thr Asp 145 150 155 160

Glu Leu Val Phe Lys Asp Ala Lys Lys Asp Asp Ala Val Arg Lys Ala 165 170 175

Tyr Lys Tyr Leu Ala Ala Leu His Glu Asn Cys Ser Gln Leu Ile Gln 180 185 190

Thr Ile Glu Asp Thr Gly Thr Ile Met Arg Glu Val Arg Asp Leu Glu 195 200 205

Glu Gln Ile Glu Thr Glu Leu Gly Lys Lys Thr Leu Ser Asn Leu Glu 210 215 220

Lys Ile Arg Glu Asp Tyr Arg Ala Leu Arg Gln Glu Asn Ala Gly Leu 225 230 235 240

Leu Gly Arg Val Arg Glu Ala 245

<210> 1260

<211> 62

<212> PRT

<213> Homo sapiens

<400> 1260

Val Gly Ile Lys Trp Ile Glu Glu Ala Val Leu Cys Ala Asn Val Ser 1 5 10 15

Phe Ala Ser Asp Arg Tyr Leu Phe Val Ile Arg Arg Val Ala Ser Phe 20 25 30

His Leu Gly Ala Glu Asn Ser Arg Gln Leu Leu Thr Asp Lys Phe Asn 35 40 45

Leu His Leu Gln Tyr Cys Met Leu Gly Ile Ser Ala Tyr Phe
50 55 60

<210> 1261

<211> 243

	<212> PRT <213> Homo sapiens														
<222	1> s: 2> (76)	quals	s any	y of	the	nati	ural:	ly o	ccur	ring	L-ar	mino	acio	ds
<220> <221> SITE <222> (210) <223> Xaa equals any of the naturally occurring L-amino acids															
<220> <221> SITE <222> (226) <223> Xaa equals any of the naturally occurring L-amino acids															
			1						4		,				
	0> 1: Glu		Pro	Gly 5	Asn	Phe	Tyr	Val	Ser 10	Ser	Glu	Ser	Ile	Arg 15	Lys
Gly	Pro	Pro	Val 20	Arg	Pro	Trp	Arg	Asp 25	Arg	Pro	Gln	Ser	Ser 30	Ile	Tyr
Asp	Pro	Phe 35	Ala	Gly	Met	Lys	Thr 40	Pro	Gly	Gln	Arg	Gln 45	Leu	Ile	Thr
Leu	Gln 50	Glu	Gln	Val	Lys	Leu 55	Gly	Ile	Val	Asn	Val 60	Asp	Glu	Ala	Val
Leu 65	His	Phe	Lys	Glu	Trp 70	Gln	Leu	Asn	Gln	Lys 75	Xaa	Arg	Ser	Glu	Ser 80
Phe	Arg	Phe	Gln	Gln 85	Glu	Asn	Leu	Lys	Arg 90	Leu	Arg	Asp	Ser	Ile 95	Thr
Arg	Arg	Gln	Arg 100	Glu	Lys	Gln	Lys	Ser 105	Gly	Lys	Gln	Thr	Asp 110	Leu	Glu
Ile	Thr	Val 115	Pro	Ile	Arg	His	Ser 120	Gln	His	Leu	Pro	Ala 125	Lys	Val	Glu
Phe	Gly 130	Val	Tyr	Glu	Ser	Gly 135	Pro	Arg	Lys	Ser	Val 140	Ile	Pro	Pro	Arg
Thr 145	Glu	Leu	Arg	Arg	Gly 150	Asp	Trp	Lys	Thr	Asp 155	Ser	Thr	Ser	Ser	Thr 160
Ala	Ser	Ser	Thr	Ser 165	Asn	Arg	Ser	Ser	Thr 170	Arg	Ser	Leu	Leu	Ser 175	Val

Ser Ser Gly Met Glu Gly Asp Asn Glu Asp Asn Glu Val Pro Glu Val
180 185 190

Thr Arg Ser Arg Ser Pro Gly Pro Pro Gln Val Asp Gly Thr Pro Thr
195 200 205

Met Xaa Leu Glu Arg Pro Pro Arg Val Pro Pro Arg Ala Ala Ser Gln 210 215 220

Arg Xaa Pro Thr Arg Glu Thr Phe His Pro Pro Pro Pro Val Pro Pro 225 230 235 240

Arg Gly Arg

<210> 1262

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1262

Lys Tyr Val Arg Asn Asp Gln Asn Lys Arg Lys Phe Leu Phe Ser Cys
1 10 15

Lys Tyr Phe Ser Ser Val Ile Thr Leu Lys Tyr Lys Leu Lys Tyr Asn 20 25 30

Thr Pro Glu Cys Leu Arg His Asp Leu Asp Phe Lys Cys Val Val Phe 35 40 45

Ile Glu Lys Lys Leu Ser Thr His Leu Val Phe Gln Glu Asn Leu Lys 50 55 60

Arg Ser Gln Gly Lys Met Ile Cys Met Leu Lys 65 70 75

<210> 1263

<211> 475

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (249)

<223> Xaa equals any of the naturally occurring L-amino acids

)> 12														
Arg 1	Thr	Gly	Leu	Gly 5	Arg	Asp	Val	Gly	Ala 10	Gly	Ala	Arg	Arg	Ala 15	Ala
Arg	Cys	Arg	Ala 20	Glu	Ala	Ala	Ala	Ala 25	Val	Gly	Thr	Ala	Arg 30	Ser	Pro
Ala	Leu	Gly 35	Met	Ala	Leu	Leu	Val 40	Leu	Gly	Leu	Val	Ser 45	Cys	Thr	Phe
Phe	Leu 50	Ala	Val	Asn	Gly	Leu 55	Tyr	Ser	Ser	Ser	Asp 60	Asp	Val	Ile	Glu
Leu 65	Thr	Pro	Ser	Asn	Phe 70	Asn	Arg	Glu	Val	Ile 75	Gln	Ser	Asp	Ser	Let 80
Trp	Leu	Val	Glu	Phe 85	Tyr	Ala	Pro	Trp	Суs 90	Gly	His	Cys	Gln	Arg 95	Leu
Thr	Pro	Glu	Trp 100	Lys	Lys	Ala	Ala	Thr 105	Ala	Leu	Lys	Asp	Val 110	Val	Lys
Val	Gly	Ala 115	Val	Asp	Ala	Asp	Lys 120	His	His	Ser	Leu	Gly 125	Gly	Gln	Туг
Gly	Val 130	Gln	Gly	Phe	Pro	Thr 135	Ile	Lys	Ile	Phe	Gly 140	Ser	Asn	Lys	Ası
Arg 145	Pro	Glu	Asp	туг	Gln 150	Gly	Gly	Arg	Thr	Gly 155	Glu	Ala	Ile	Val	Asp 160
Ala	Ala	Leu	Ser	Ala 165	Leu	Arg	Gln	Leu	Val 170	Lys	Asp	Arg	Leu	Gly 175	Gly
Arg	Ser	Gly	Gly 180	Tyr	Ser	Ser	Gly	Lys 185	Gln	Gly	Arg	Ser	Asp 190	Ser	Ser
Ser	Lys	Lys 195	Asp	Val	Ile	Glu	Leu 200	Thr	Asp	Asp	Ser	Phe 205	Asp	Lys	Asr
Val	Leu 210	Asp	Ser	Glu	Asp	Val 215	Trp	Met	Val	Glu	Phe 220	Tyr	Ala	Pro	Trp
Cys 225	Gly	His	Cys	Lys	Asn 230	Leu	Glu	Pro	Glu	Trp 235	Ala	Ala	Ala	Ala	Ser 240
Glu	Val	Lys	Glu	Gln 245	Thr	Lys	Gly	Xaa	Val 250	Lys	Leu	Ala	Ala	Val 255	Asp
Ala	Thr	Val	Asn 260	Gln	Val	Leu	Ala	Ser 265	Arg	Tyr	Gly	Ile	Arg 270	Gly	Phe

1287

Pro Thr Ile Lys Ile Phe Gln Lys Gly Glu Ser Pro Val Asp Tyr Asp 275 280 Gly Gly Arg Thr Arg Ser Asp Ile Val Ser Arg Ala Leu Asp Leu Phe 295 Ser Asp Asn Ala Pro Pro Pro Glu Leu Leu Glu Ile Ile Asn Glu Asp 310 315 Ile Ala Lys Arg Thr Cys Glu Glu His Gln Leu Cys Val Val Ala Val 330 325 Leu Pro His Ile Leu Asp Thr Gly Ala Ala Gly Arg Asn Ser Tyr Leu 345 340 Glu Val Leu Leu Lys Leu Ala Asp Lys Tyr Lys Lys Met Trp Gly 360 Trp Leu Trp Thr Glu Ala Gly Ala Gln Ser Glu Leu Glu Thr Ala Leu 375 Gly Ile Gly Gly Phe Gly Tyr Pro Ala Met Ala Ala Ile Asn Ala Arg 390 395 385 Lys Met Lys Phe Ala Leu Leu Lys Gly Ser Phe Ser Glu Gln Gly Ile 405 410 Asn Glu Phe Leu Arg Glu Leu Ser Phe Gly Arg Gly Ser Thr Ala Pro 425 Val Gly Gly Ala Phe Pro Thr Ile Val Glu Arg Glu Pro Trp Asp 435 440 Gly Arg Asp Gly Glu Leu Pro Val Glu Asp Asp Ile Asp Leu Ser Asp 455 Val Glu Leu Asp Asp Leu Gly Lys Asp Glu Leu 470

<210> 1264

<211> 398

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

1288

<400> 1264

His l	Phe	Glu	Arg	Thr 5	Ser	Ser	Lys	Arg	Val 10	Ser	Arg	Ser	Leu	Asp 15	Gly
Ala	Pro	Ile	Gly 20	Val	Met	Asp	Gln	Ser 25	Leu	Met	Xaa	Asp	Phe 30	Pro	Gly
Ala	Ala	Gly 35	Glu	Ile	Ser	Ala	Tyr 40	Gly	Pro	Gly	Leu	Val 45	Ser	Ile	Ala
Val	Val 50	Gln	Asp	Gly	Asp	Gly 55	Arg	Arg	Glu	Val	Arg 60	Ser	Pro	Thr	Lys
Ala 65	Pro	His	Leu	Gln	Leu 70	Ile	Glu	Gly	Lys	Ser 75	Ser	His	Glu	Thr	Let 80
Asn	Ile	Val	Glu	Glu 85	Lys	Lys	Arg	Ala	Glu 90	Val	Gly	Lys	Asp	Glu 95	Arg
Val	Ile	Thr	Glu 100	Glu	Met	Asn	Gly	Lys 105	Glu	Ile	Ser	Pro	Gly 110	Ser	Gly
Pro	Gly	Glu 115	Ile	Arg	Lys	Val	Glu 120	Pro	Val	Thr	Gln	Lys 125	Asp	Ser	Thr
Ser	Leu 130	Ser	Ser	Glu	Ser	Ser 135	Ser	Ser	Ser	Ser	Glu 140	Ser	Glu	Glu	Glu
Asp 145	Val	Gly	Glu	Tyr	Arg 150	Pro	His	His	Arg	Val 155	Thr	Glu	Gly	Thr	11e
Arg	Glu	Glu	Gln	Glu 165	Tyr	Glu	Glu	Glu	Val 170	Glu	Glu	Glu	Pro	Arg 175	Pro
Ala	Ala	Lys	Val 180	Val	Glu	Arg	Glu	Glu 185	Ala	Val	Pro	Glu	Ala 190	Ser	Pro
Val	Thr	Gln 195	Ala	Gly	Ala	Ser	Val 200	Ile	Thr	Val	Glu	Thr 205	Val	Ile	Glr
Glu	Asn 210	Val	Gly	Ala	Gln	Lys 215	Ile	Pro	Gly	Glu	Lys 220	Ser	Val	His	Glu
Gly 225	Ala	Leu	Lys	Gln	Asp 230	Met	Gly	Glu	Glu	Ala 235	Glu	Glu	Glu	Pro	Glr 240
Lys	Val	Asn	Gly	Glu 245	Val	Ser	His	Val	Asp 250	Ile	Asp	Val	Leu	Pro 255	Glr
Ile	Ile	Cys	Cys	Ser	Glu	Pro	Pro	Val	Val	Lys	Thr	Glu	Met	Val	Thr

1289

265 270 260 Ile Ser Asp Ala Ser Gln Arg Thr Glu Ile Ser Thr Lys Glu Val Pro 275 280 285 Ile Val Gln Thr Glu Thr Lys Thr Ile Thr Tyr Glu Ser Pro Gln Ile 295 Asp Gly Gly Ala Gly Gly Asp Ser Gly Thr Leu Leu Thr Ala Gln Thr 310 315 Ile Thr Ser Glu Ser Val Ser Thr Thr Thr Thr His Ile Thr Lys 325 330 Thr Val Lys Gly Gly Ile Ser Glu Thr Arg Ile Glu Lys Arg Ile Val Ile Thr Gly Asp Gly Asp Ile Asp His Asp Gln Ala Leu Ala Gln Ala Ile Arg Glu Ala Arg Glu Gln His Pro Asp Met Ser Val Thr Arg Val 370 375 380 Val Val His Lys Glu Thr Glu Leu Ala Glu Glu Gly Glu Asp 395 390 <210> 1265 <211> 207 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (99) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1265 Trp Thr Gly Thr Gly Arg Gly Ala Val Ala Ile Met Ala Asp Pro Asp 10 Pro Arg Tyr Pro Arg Ser Ser Ile Glu Asp Asp Phe Asn Tyr Gly Ser 20 Ser Val Ala Ser Ala Thr Val His Ile Arg Met Ala Phe Leu Arg Lys Val Tyr Ser Ile Leu Ser Leu Gln Val Leu Leu Thr Thr Val Thr Ser

Thr Val Phe Leu Tyr Phe Glu Ser Val Arg Thr Phe Val His Glu Ser 75 Pro Ala Leu Ile Leu Leu Phe Ala Leu Gly Ser Leu Gly Leu Ile Phe 90 85 Ala Leu Xaa Leu Asn Arg His Lys Tyr Pro Leu Asn Leu Tyr Leu Leu 100 105 Phe Gly Phe Thr Leu Leu Glu Ala Leu Thr Val Ala Val Val Thr 120 125 Phe Tyr Asp Val Tyr Ile Ile Leu Gln Ala Phe Ile Leu Thr Thr 135 Val Phe Phe Gly Leu Thr Val Tyr Thr Leu Gln Ser Lys Lys Asp Phe 145 150 Ser Lys Phe Gly Ala Gly Leu Phe Ala Leu Leu Trp Ile Leu Cys Leu 165 170 Ser Gly Phe Leu Lys Phe Phe Phe Tyr Ser Glu Ile Met Glu Leu Val 185

<210> 1266

<211> 289

<212> PRT

<213> Homo sapiens

<400> 1266

Ser Arg Asp Pro Asn Gly Trp Trp Arg Arg Leu Arg Val Ser Ala Glu
1 5 10 15

Leu Ala Ala Ala Gly Ala Leu Leu Phe Trp Gly Ile His His Leu

Leu Ala Met Ala Gln Leu Cys Gly Leu Arg Arg Ser Arg Ala Phe Leu 20 25 30

Ala Leu Leu Gly Ser Leu Leu Leu Ser Gly Val Leu Ala Ala Asp Arg
35 40 45

Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg
50 55 60

Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser 65 70 75 80

Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr

90 95 85 Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val Thr Glu Asn 100 105 Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met 135 Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys 150 155 Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys 165 170 Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg 180 185 Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys Val Val Leu Ala Gly Leu Phe Val 215 Met Val Leu Ile Leu Phe Leu Gly Ala Ser Met Val Tyr Leu Ile Arg 225 230 235 Val Ala Arg Arg Asn Gln Glu Arg Ala Leu Arg Thr Val Trp Ser Ser Gly Asp Asp Lys Glu Gln Leu Val Lys Asn Thr Tyr Val Leu Cys Arg

Pro Val Ala Lys Arg Thr Gly Glu Gly Arg Gly Asp Met Cys Asp Phe 275 280 285

Phe

<210> 1267

<211> 284

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

1292

<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (6) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1267 Arg Gly Arg Arg Xaa Xaa Ala Ser Leu Arg Gly Trp Pro Val Arg Arg 10 5 Gly Met Gly Arg Val Gln Leu Phe Glu Ile Ser Leu Ser His Gly Arg 25 20 Val Val Tyr Ser Pro Gly Glu Pro Leu Ala Gly Thr Val Arg Val Arg 40 Leu Gly Ala Pro Leu Pro Phe Arg Ala Ile Arg Val Thr Cys Ile Gly Ser Cys Gly Val Ser Asn Lys Ala Asn Asp Thr Ala Trp Val Val Glu 70 Glu Gly Tyr Phe Asn Ser Ser Leu Ser Leu Ala Asp Lys Gly Ser Leu 90 Pro Ala Gly Glu His Ser Phe Pro Phe Gln Phe Leu Leu Pro Ala Thr 110 100 105 Ala Pro Thr Ser Phe Glu Gly Pro Phe Gly Lys Ile Val His Gln Val 120 Arg Ala Ala Ile His Thr Pro Arg Phe Ser Lys Asp His Lys Cys Ser 135 Leu Val Phe Tyr Ile Leu Ser Pro Leu Asn Leu Asn Ser Ile Pro Asp 155 145 150 Ile Glu Gln Pro Asn Val Ala Ser Ala Thr Lys Lys Phe Ser Tyr Lys 165 . 170 Leu Val Lys Thr Gly Ser Val Val Leu Thr Ala Ser Thr Asp Leu Arg Gly Tyr Val Val Gly Gln Ala Leu Gln Leu His Ala Asp Val Glu Asn 195 Gln Ser Gly Lys Asp Thr Ser Pro Val Val Ala Ser Leu Leu Gln Lys 210 215 Val Ser Tyr Lys Ala Lys Arg Trp Ile His Asp Val Arg Thr Ile Ala

1293

225 230 235 240 Glu Val Glu Gly Ala Gly Val Lys Ala Trp Arg Arg Ala Gln Trp His 250 245 Glu Gln Ile Leu Val Pro Ala Leu Pro Gln Ser Ala Leu Pro Ala Ala 265 Ala Ser Ser Thr Ser Thr Thr Thr Tyr Arg Ser Leu 280 <210> 1268 <211> 254 <212> PRT <213> Homo sapiens <400> 1268 Val Trp Leu Arg Val Glu Asn Val Cys Gln Gly Pro Gly Gln Glu Gly 10 Gly Pro Pro Val Thr Met Val Ser Met Ser Phe Lys Arg Asn Arg Ser 25 20 Asp Arg Phe Tyr Ser Thr Arg Cys Cys Gly Cys Cys His Val Arg Thr 40 Gly Thr Ile Ile Leu Gly Thr Trp Tyr Met Val Val Asn Leu Leu Met 55 Ala Ile Leu Leu Thr Val Glu Val Thr His Pro Asn Ser Met Pro Ala 65 70 Val Asn Ile Gln Tyr Glu Val Ile Gly Asn Tyr Tyr Ser Ser Glu Arg 85 Met Ala Asp Asn Ala Cys Val Leu Phe Ala Val Ser Val Leu Met Phe 105 Ile Ile Ser Ser Met Leu Val Tyr Gly Ala Ile Ser Tyr Gln Val Gly 115 120 Trp Leu Ile Pro Phe Phe Cys Tyr Arg Leu Phe Asp Phe Val Leu Ser 135 Cys Leu Val Ala Ile Ser Ser Leu Thr Tyr Leu Pro Arg Ile Lys Glu 155 150 Tyr Leu Asp Gln Leu Pro Asp Phe Pro Tyr Lys Asp Asp Leu Leu Ala 170 165

1294

Leu Asp Ser Ser Cys Leu Leu Phe Ile Val Leu Val Phe Phe Ala Leu 180 185 Phe Ile Ile Phe Lys Ala Tyr Leu Ile Asn Cys Val Trp Asn Cys Tyr 195 200 205 Lys Tyr Ile Asn Asn Arg Asn Val Pro Glu Ile Ala Val Tyr Pro Ala 215 Phe Glu Ala Pro Pro Gln Tyr Val Leu Pro Thr Tyr Glu Met Ala Val 230 235 Lys Met Pro Glu Lys Glu Pro Pro Pro Tyr Leu Pro Ala 245 250 <210> 1269 <211> 67 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (17) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (49) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (52) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (53) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1269 Lys Ser Ile Leu Val Ile Arg Val Tyr Phe Phe Tyr Arg Thr Arg Trp 10 Xaa Gly Gly Glu Pro Phe Thr Leu Leu Val Lys Leu Asn His Arg Lys

25

Phe Thr Ile Cys Leu Ser Gln Thr Leu Ala Val Arg Gly Met Val Ala

35 40 45 Xaa Ala Cys Xaa Xaa Pro Ala Cys Trp Gly Gly Pro Ser Trp Gly Gly 50 55 Leu Pro Glu 65 <210> 1270 <211> 164 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (6) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (13) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (138) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (152) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (161) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (164) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1270

1296

Gly Ser Pro Gly Thr Xaa Arg Ile Pro Xaa Thr Arg Xaa Glu Thr Cys
1 5 10 15

Phe Asp Lys Tyr Thr Gly Asn Thr Tyr Arg Val Gly Asp Thr Tyr Glu 20 25 30

Arg Pro Lys Asp Ser Met Ile Trp Asp Cys Thr Cys Ile Gly Ala Gly
35 40 45

Arg Gly Arg Ile Ser Cys Thr Ile Ala Asn Arg Cys His Glu Gly Gly 50 55 60

Gln Ser Tyr Lys Ile Gly Asp Thr Trp Arg Arg Pro His Glu Thr Gly
65 70 75 80

Gly Tyr Met Leu Glu Cys Val Cys Leu Gly Asn Gly Lys Gly Glu Trp 85 90 95

Thr Cys Lys Pro Ile Ala Glu Lys Cys Phe Asp His Ala Ala Gly Thr
100 105 110

Ser Tyr Val Val Gly Glu Thr Trp Glu Lys Pro Tyr Gln Gly Trp Met 115 120 125

Met Val Asp Cys Thr Cys Leu Gly Glu Xaa Ser Gly Arg Ile Thr Cys 130 135 140

Xaa Glu Thr Xaa

<210> 1271

<211> 363

<212> PRT

<213> Homo sapiens

<400> 1271

Ala Arg Gly Ser Glu Cys Gly Gln Arg Ala Glu Ala Val Ser His Arg 1 5 10 15

Arg Arg Arg Ala Gln Ala Ser Ser Phe Gly Trp Gly Ala Ala Glu 20 25 30

Leu Thr Ser Asp Ile Ser Ala Pro Phe Thr Arg Arg Asn Pro Gly Ala
35 40 45

Gly Ala Arg Ser Ala Gly Val Thr Met Thr Lys Ala Gly Ser Lys Gly

60 50 55 Gly Asn Leu Arg Asp Lys Leu Asp Gly Asn Glu Leu Asp Leu Ser Leu Ser Asp Leu Asn Glu Val Pro Val Lys Glu Leu Ala Ala Leu Pro Lys 90 Ala Thr Ile Leu Asp Leu Ser Cys Asn Lys Leu Thr Thr Leu Pro Ser 105 Asp Phe Cys Gly Leu Thr His Leu Val Lys Leu Asp Leu Ser Lys Asn 115 Lys Leu Gln Gln Leu Pro Ala Asp Phe Gly Arg Leu Val Asn Leu Gln His Leu Asp Leu Leu Asn Asn Lys Leu Val Thr Leu Pro Val Ser Phe 155 Ala Gln Leu Lys Asn Leu Lys Trp Leu Asp Leu Lys Asp Asn Pro Leu 170 165 Asp Pro Val Leu Ala Lys Val Ala Gly Asp Cys Leu Asp Glu Lys Gln 185 Cys Lys Gln Cys Ala Asn Lys Val Leu Gln His Met Lys Ala Val Gln Ala Asp Gln Glu Arg Glu Arg Gln Arg Arg Leu Glu Val Glu Arg Glu 210 215 Ala Glu Lys Lys Arg Glu Ala Lys Gln Arg Ala Lys Glu Ala Gln Glu 230 235 Arg Glu Leu Arg Lys Arg Glu Lys Ala Glu Glu Lys Glu Arg Arg Arg 245 250 Lys Glu Tyr Asp Ala Leu Lys Ala Ala Lys Arg Glu Gln Glu Lys Lys Pro Lys Lys Glu Ala Asn Gln Ala Pro Lys Ser Lys Ser Gly Ser Arg 280 Pro Arg Lys Pro Pro Pro Arg Lys His Thr Arg Ser Trp Ala Val Leu 290 295 300 Lys Leu Leu Leu Leu Leu Phe Gly Val Ala Gly Gly Leu Val 310 315 305 Ala Cys Arg Val Thr Glu Leu Gln Gln Gln Pro Leu Cys Thr Ser Val

1298

335 325 330 Asn Thr Ile Tyr Asp Asn Ala Val Gln Gly Leu Arg Arg His Glu Ile 340 345 Leu Gln Trp Val Leu Gln Thr Asp Ser Gln Gln 355 360 <210> 1272 <211> 144 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (112) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (116) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (124) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1272 Gly Leu Val Met Ala Pro Ile Ala Cys Leu Leu Pro Ala Phe Ser Ser Ala Pro Glu Ala Met His Pro Trp Glu Leu Phe Val Lys Tyr Tyr His 25 Ala Lys Asn Gly Arg Ala Tyr Val Glu Ser Pro Ala Arg Lys Leu Ser 40 Gln Ser Phe Ala Leu Pro Val Thr Gly Gly Thr Val Val Thr Pro Lys 50 55 Gln Ser Leu Leu Thr Ala Ile His Met Val Leu Thr Glu His Asp Pro 70 Phe Lys Arg Ser Ala Asp Ser Glu Leu Lys Ala Leu Val Cys Met Ala 90

Leu Asn Glu Pro Ala Ser Gly Val Leu Gly Glu Pro His Leu Gln Xaa

100

105 . 110

1299

Arg Val Thr Xaa Arg Ala Ser Leu Pro Ala Leu Xaa Leu His Gly Thr
115 120 125

His Arg Leu Leu Lys Ile Ala Ser Thr Cys Ser Val Ala Ser Thr Thr 130 135 140

<210> 1273

<211> 252

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (32)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1273

Ala Arg Ala Pro Pro Arg Pro Arg Arg Ala Gly Arg Cys Gln Leu Pro 1 5 10 15

Gln Arg Pro Ala Glu Ala Arg Cys Met Leu Ser Arg Cys Arg Ser Xaa 20 25 30

Leu Leu His Val Leu Gly Leu Ser Phe Leu Leu Gln Thr Arg Arg Pro 35 40 45

Ile Leu Leu Cys Ser Pro Arg Leu Met Lys Pro Leu Val Val Phe Val 50 55 60

Leu Gly Gly Pro Gly Ala Gly Lys Gly Thr Gln Cys Ala Arg Ile Val
65 70 75 80

Glu Lys Tyr Gly Tyr Thr His Leu Ser Ala Gly Glu Leu Leu Arg Asp
85 90 95

Glu Arg Lys Asn Pro Asp Ser Gln Tyr Gly Glu Leu Ile Glu Lys Tyr 100 105 110

Ile Lys Glu Gly Lys Ile Val Pro Val Glu Ile Thr Ile Ser Leu Leu 115 120 125

Lys Arg Glu Met Asp Gln Thr Met Ala Ala Asn Ala Gln Lys Asn Lys 130 135 140

Phe Leu Ile Asp Gly Phe Pro Arg Asn Gln Asp Asn Leu Gln Gly Trp

1300

150 155 160 145 Asn Lys Thr Met Asp Gly Lys Ala Asp Val Ser Phe Val Leu Phe Phe 170 165 Asp Cys Asn Asn Glu Ile Cys Ile Glu Arg Cys Leu Glu Arg Gly Lys 185 Ser Ser Gly Arg Ser Asp Asp Asn Arg Glu Ser Leu Glu Lys Arg Ile 200 Gln Thr Tyr Leu Gln Ser Thr Lys Pro Ile Ile Asp Leu Tyr Glu Glu 215 Met Gly Lys Val Lys Lys Ile Asp Ala Ser Lys Ser Val Asp Glu Val 230 235 Phe Asp Glu Val Val Gln Ile Phe Asp Lys Glu Gly <210> 1274 <211> 425 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (35) <223> Xaa equals any of the naturally occurring L-amino acids Ala Ser Glu Arg Ser Glu Ala Arg Arg Lys Leu Arg Glu Cys Asp Gly 10 5 Leu Val Asp Ala Leu Ile Phe Ile Val Gln Ala Glu Ile Gly Gln Lys 25 Asp Ser Xaa Ser Lys Leu Val Glu Asn Cys Val Cys Leu Leu Arg Asn Leu Ser Tyr Gln Val His Arg Glu Ile Pro Gln Ala Glu Arg Tyr Gln 50 Glu Ala Ala Pro Asn Val Ala Asn Asn Thr Gly Pro His Ala Ala Ser 70 Cys Phe Gly Ala Lys Lys Gly Lys Gly Lys Pro Ile Glu Asp Pro 90

Ala	Asn	Asp	Thr 100	Val	Asp	Phe	Pro	Lys 105	Arg	Thr	Ser	Pro	Ala 110	Arg	Gly
Tyr	Glu	Leu 115	Leu	Phe	Gln	Pro	Glu 120	Val	Val	Arg	Ile	туr 125	Ile	Ser	Leu
Leu	Lys 130	Glu	Ser	Lys	Thr	Pro 135	Ala	Ile	Leu	Glu	Ala 140	Ser	Ala	Gly	Ala
Ile 145	Gln	Asn	Leu	Cys	Ala 150	Gly	Arg	Trp	Thr	Tyr 155	Gly	Arg	туr	Ile	Arg 160
Ser	Ala	Leu	Arg	Gln 165	Glu	Lys	Ala	Leu	Ser 170	Ala	Ile	Ala	Asp	Leu 175	Leu
Thr	Asn	Glu	His 180	Glu	Arg	Val	Val	Lys 185	Ala	Ala	Ser	Gly	Ala 190	Leu	Arg
Asn	Leu	Ala 195	Val	Asp	Ala	Arg	Asn 200	Lys	Glu	Leu	Ile	Gly 205	Lys	His	Ala
Ile	Pro 210	Asn	Leu	Val	Lys	Asn 215	Leu	Pro	Gly	Gly	Gln 220	Gln	Asn	Ser	Ser
Trp 225	Asn	Phe	Ser	Glu	Asp 230	Thr	Val	Ile	Ser	Ile 235	Leu	Asn	Thr	Ile	Asn 240
Glu	Val	Ile	Ala	Glu 245	Asn	Leu	Glu	Ala	Ala 250	Lys	Lys	Leu	Arg	Glu 255	Thr
Gln	Gly	Ile	Glu 260	Lys	Leu	Val	Leu	Ile 265	Asn	Lys	Ser	Gly	Asn 270	Arg	Ser
Glu	Lys	Glu 275	Val	Arg	Ala	Ala	Ala 280	Leu	Val	Leu	Gln	Thr 285	Ile	Trp	Gly
Tyr	Lys 290	Glu	Leu	Arg	Lys	Pro 295	Leu	Glu	Lys	Glu	Gly 300	Trp	Lys	Lys	Ser
Asp 305	Phe	Gln	Val	Asn	Leu 310	Asn	Asn	Ala	Ser	Arg 315	Ser	Gln	Ser	Ser	His 320
Ser	Tyr	Asp	Asp	Ser 325	Thr	Leu	Pro	Leu	Ile 330	Asp	Arg	Asn	Gln	Lys 335	Ser
Asp	Lys	Lys	Pro 340	Asp	Arg	Glu	Glu	Ile 345	Gln	Met	Ser	Asn	Met 350	Gly	Ser
Asn	Thr	Lys 355	Ser	Leu	Asp	Asn	Asn 360	Tyr	Ser	Thr	Pro	Asn 365	Glu	Arg	Gly

Asp His Asn Arg Thr Leu Asp Arg Ser Gly Asp Leu Gly Asp Met Glu 370 375 380

Pro Leu Lys Gly Thr Thr Pro Leu Met Gln Asp Glu Gly Gln Glu Ser 385 390 395 400

Leu Glu Glu Glu Leu Asp Val Leu Val Leu Asp Asp Glu Gly Gln 405 410 415

Val Ser Tyr Pro Ser Met Gln Lys Ile 420 425

<210> 1275

<211> 111

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1275

Phe Phe Phe Ser Ser Leu Phe Ser Leu Xaa Phe Leu Lys Lys Gly Lys
1 5 10 15

Lys Cys Ile Arg Thr Pro Lys Ile Ser Lys Pro Ile Lys Phe Glu Leu 20 25 30

Ser Gly Cys Thr Ser Met Lys Thr Tyr Arg Ala Lys Phe Cys Gly Val 35 40 45

Cys Thr Asp Gly Arg Cys Cys Thr Pro His Arg Thr Thr Leu Pro 50 55 60

Val Glu Phe Lys Cys Pro Asp Gly Glu Val Met Lys Lys Asn Met Met 65 70 75 80

Phe Ile Lys Thr Cys Ala Cys His Tyr Asn Cys Pro Gly Asp Asn Asp 85 90 95

Ile Phe Glu Ser Leu Tyr Tyr Arg Lys Met Tyr Gly Asp Met Ala 100 105 110

<210> 1276

<211> 766

<212> PRT

PCT/US00/05882

<213> Homo sapiens

<400)> 12	276													
Gly 1	Asp	Phe	Ile	Met 5	Leu	Arg	Ala	Gly	Arg 10	Arg	Ala	Pro	Leu	Pro 15	Ser
Pro	Pro	Ser	Leu 20	Asp	Ser	Pro	Gly	Pro 25	Gln	Leu	Met	Pro	Ser 30	Pro	Arg
Pro	Val	Leu 35	Leu	Arg	Gly	Ala	Arg 40	Ala	Ala	Leu	Leu	Leu 45	Leu	Leu	Pro
Pro	Arg 50	Leu	Leu	Ala	Arg	Pro 55	Ser	Leu	Leu	Leu	Arg 60	Arg	Ser	Leu	Ser
Ala 65	Ala	Ser	Cys	Ala	Pro 70	Ile	Ser	Leu	Pro	Ala 75	Ala	Ala	Ser	Arg	Ser 80
Ser	Met	Asp	Gly	Ala 85	Gly	Ala	Glu	Glu	Val 90	Leu	Ala	Pro	Leu	Arg 95	Leu
Ala	Val	Arg	Gln 100	Gln	Gly	Asp	Leu	Val 105	Arg	Lys	Leu	Lys	Glu 110	Asp	Lys
Ala	Pro	Gln 115	Val	Asp	Val	Asp	Lys 120	Ala	Val	Ala	Glu	Leu 125	Lys	Ala	Arg
Lys	Arg 130	Val	Leu	Glu	Ala	Lys 135	Glu	Leu	Ala	Leu	Gln 140	Pro	Lys	Asp	Asp
Ile 145	Val	Asp	Arg	Ala	Lys 150	Met	Glu	Asp	Thr	Leu 155	Lys	Arg	Arg	Phe	Phe
туr	Asp	Gln	Ala	Phe 165	Ala	Ile	Tyr	Gly	Gly 170	Val	Ser	Gly	Leu	Туг 175	Asp
Phe	Gly	Pro	Val 180	Gly	Cys	Ala	Leu	Lys 185	Asn	Asn	Ile	Ile	Gln 190	Thr	Trp
Arg	Gln	Ніs 195	Phe	Ile	Gln	Glu	Glu 200	Gln	Ile	Leu	Glu	Ile 205	Asp	Cys	Thr
Met	Leu 210	Thr	Pro	Glu	Pro	Val 215	Leu	Lys	Thr	Ser	Gly 220	His	Val	Asp	Lys
Phe 225	Ala	Asp	Phe	Met	Val 230	Lys	Asp	Val	Lys	Asn 235	Gly	Glu	Cys	Phe	Arg 240
Ala	Asp	His		Leu	Lys	Ala	His		Gln 250		Leu	Met	Ser	Asp	

Lys	Cys	Ser	Val 260	Glu	Lys	Lys	Ser	Glu 265	Met	Glu	Ser	Val	Leu 270	Ala	Gln
Leu	Asp	Asn 275	туг	Gly	Gln	Gln	Glu 280	Leu	Ala	Asp	Leu	Phe 285	Val	Asn	Tyr
Asn	Val 290	Lys	Ser	Pro	Ile	Thr 295	Gly	Asn	Asp	Leu	Ser 300	Pro	Pro	Val	Ser
Phe 305	Asn	Leu	Met	Phe	Lys 310	Thr	Phe	Ile	Gly	Pro 315	Gly	Gly	Asn	Met	Pro 320
Gly	Tyr	Leu	Arg	Pro 325	Glu	Thr	Ala	Gln	Gly 330	Ile	Phe	Leu	Asn	Phe 335	Lys
Arg	Leu	Leu	Glu 340	Phe	Asn	Gln	Gly	Lys 345	Leu	Pro	Phe	Ala	Ala 350	Ala	Gln
Ile	Gly	Asn 355	Ser	Phe	Arg	Asn	Glu 360	Ile	Ser	Pro	Arg	Ser 365	Gly	Leu	Ile
Arg	Val 370	Arg	Glu	Phe	Thr	Met 375	Ala	Glu	Ile	Glu	His 380	Phe	Val	Asp	Pro
Ser 385	Glu	Lys	Asp	His	Pro 390	Lys	Phe	Gln	Asn	Val 395	Ala	Asp	Leu	His	Leu 400
Tyr	Leu	Tyr	Ser	Ala 405	Lys	Ala	Gln	Val	Ser 410	Gly	Gln	Ser	Ala	Arg 415	Lys
Met	Arg	Leu	Gly 420	Asp	Ala	Val	Glu	Gln 425	Gly	Val	Ile	Asn	Asn 430	Thr	Val
Leu	Gly	туr 435	Phe	Ile	Gly	Arg	Ile 440	Tyr	Leu	Tyr	Leu	Thr 445	Lys	Val	Gly
Ile	Ser 450	Pro	Asp	Lys	Leu	Arg 455	Phe	Arg	Gln	His	Met 460	Glu	Asn	Glu	Met
Ala 465	His	Tyr	Ala	Cys	Asp 470	Cys	Trp	Asp	Ala	Glu 475	Ser	Lys	Thr	Ser	Tyr 480
Gly	Trp	Ile	Glu	Ile 485	Val	Gly	Cys	Ala	Asp 490	Arg	Ser	Cys	Tyr	Asp 495	Leu
Ser	Cys	His	Ala 500	Arg	Ala	Thr	Lys	Val 505	Pro	Leu	Val	Ala	Glu 510	Lys	Pro
Leu	Lys	Glu 515	Pro	Lys	Thr	Val	Asn 520	Val	Val	Gln	Phe	Glu 525	Pro	Ser	Lys

Gly	Ala 530	Ile	Gly	Lys	Ala	Туг 535	Lys	Lys	Asp	Ala	Lys 540	Leu	Val	Met	Glu
Tyr 545	Leu	Ala	Ile	Cys	Asp 550	Glu	Cys	Tyr	Ile	Thr 555	Glu	Met	Glu	Met	Leu 560
Leu	Asn	Glu	Lys	Gly 565	Glu	Phe	Thr	Ile	Glu 570	Thr	Glu	Gly	Lys	Thr 575	Phe
Gln	Leu	Thr	Lys 580	Asp	Met	Ile	Asn	Val 585	Lys	Arg	Phe	Gln	Lys 590	Thr	Leu
Tyr	Val	Glu 595	Glu	Val	Val	Pro	Asn 600	Val	Ile	Glu	Pro	Ser 605	Phe	Gly	Leu
Gly	Arg 610	Ile	Met	Tyr	Thr	Val 615	Phe	Glu	His	Thr	Phe 620	His	Val	Arg	Glu
Gly 625	Asp	Glu	Gln	Arg	Thr 630	Phe	Phe	Ser	Phe	Pro 635	Ala	Val	Val	Ala	Pro 640
Phe	Lys	Cys	Ser	Val 645	Leu	Pro	Leu	Ser	Gln 650	Asn	Gln	Glu	Phe	Met 655	Pro
Phe	Val	Lys	Glu 660	Leu	Ser	Glu	Ala	Leu 665	Thr	Arg	His	Gly	Val 670	Ser	His
Lys	Val	Asp 675	Asp	Ser	Ser	Gly	Ser 680	Ile	Gly	Arg	Arg	Tyr 685	Ala	Arg	Thr
Asp	Glu 690	Ile	Gly	Val	Ala	Phe 695	Gly	Val	Thr	Ile	Asp 700	Phe	Asp	Thr	Val
Asn 705	Lys	Thr	Pro	His	Thr 710	Ala	Thr	Leu	Arg	Asp 715	Arg	Asp	Ser	Met	Arg 720
Gln	Ile	Arg	Ala	Glu 725	Ile	Ser	Glu	Leu	Pro 730	Ser	Ile	Val	Gln	Asp 735	Leu
Ala	Asn	Gly	Asn 740	Ile	Thr	Trp	Ala	Asp 745	Val	Glu	Ala	Arg	туг 750	Pro	Leu
Phe	Glu	Gly 755	Gln	Glu	Thr	Gly	Lys 760	Lys	Glu	Thr	Ile	Glu 765	Glu		

<210> 1277

<211> 386

<212> PRT

<213> Homo sapiens

<220)>														
<22	1> s:	ITE													
<222	2> (1	75)													
<22:	3> Xa	aa e	quals	s any	y of	the	nati	ıral	Ly o	ccuri	ring	L-ar	mino	acio	is
<400)> 12	277													
Leu 1	Gly	Ser	Arg	Gln 5	Ala	Ala	Gly	Thr	Met 10	Arg	Gly	Gln	Arg	Ser 15	Leu
Leu	Leu	Gly	Pro 20	Ala	Arg	Leu	Cys	Leu 25	Arg	Leu	Leu	Leu	Leu 30	Leu	Gly
Tyr	Arg	Arg 35	Arg	Cys	Pro	Pro	Leu 40	Leu	Arg	Gly	Leu	Val 45	Gln	Arg	Trp
Arg	Tyr 50	Gly	Lys	Val	Cys	Leu 55	Arg	Ser	Leu	Leu	Tyr 60	Asn	Ser	Phe	Gly
Gly 65	Ser	Asp	Thr	Ala	Val 70	Asp	Ala	Ala	Phe	Xaa 75	Pro	Val	Tyr	Trp	Leu 80
Val	Asp	Asn	Val	Ile 85	Arg	Trp	Phe	Gly	Val 90	Val	Phe	Val	Val	Leu 95	Val
Ile	Val	Leu	Thr 100	Gly	Ser	Ile	Val	Ala 105	Ile	Ala	Tyr	Leu	Cys 110	Val	Leu
Pro	Leu	Ile 115	Leu	Arg	Thr	Tyr	Ser 120	Val	Pro	Arg	Leu	Cys 125	Trp	His	Phe
Phe	Tyr 130	Ser	His	Trp	Asn	Leu 135	Ile	Leu	Ile	Val	Phe 140	His	Tyr	туr	Gln
Ala 145	Ile	Thr	Thr	Pro	Pro 150	Gly	Tyr	Pro	Pro	Gln 155	Gly	Arg	Asn	Asp	Ile 160
Ala	Thr	Val	Ser	11e 165	Cys	Lys	Lys	Cys	Ile 170	Tyr	Pro	Lys	Pro	Ala 175	Arg
Thr	His	His	Cys 180	Ser	Ile	Cys	Asn	Arg 185	Cys	Val	Leu	Lys	Met 190	Asp	His
His	Cys	Pro 195	Trp	Leu	Asn	Asn	Cys 200	Val	Gly	His	Tyr	Asn 205	His	Arg	Tyr
Phe	Phe 210	Ser	Phe	Cys	Phe	Phe 215	Met	Thr	Leu	Gly	Cys 220	Val	Tyr	Cys	Ser
Tyr 225	Gly	Ser	Trp	Asp	Leu 230	Phe	Arg	Glu	Ala	Tyr 235	Ala	Ala	Ile	Glu	Lys 240

1307

Met Lys Gln Leu Asp Lys Asn Lys Leu Gln Ala Val Ala Asn Gln Thr 245 250 255

Tyr His Gln Thr Pro Pro Pro Thr Phe Ser Phe Arg Glu Arg Met Thr 260 265 270

His Lys Ser Leu Val Tyr Leu Trp Phe Leu Cys Ser Ser Val Ala Leu 275 280 285

Ala Leu Gly Ala Leu Thr Val Trp His Ala Val Leu Ile Ser Arg Gly 290 295 300

Glu Thr Ser Ile Glu Arg His Ile Asn Lys Lys Glu Arg Arg Arg Leu 305 310 315 320

Gln Ala Lys Gly Arg Val Phe Arg Asn Pro Tyr Asn Tyr Gly Cys Leu 325 330 335

Asp Asn Trp Lys Val Phe Leu Gly Val Asp Thr Gly Arg His Trp Leu 340 345 350

Thr Arg Val Leu Pro Ser Ser His Leu Pro His Gly Asn Gly Met 355 360 365

Ser Trp Glu Pro Pro Pro Trp Val Thr Ala His Ser Ala Ser Val Met 370 375 380

Ala Val 385

<210> 1278

<211> 164

<212> PRT

<213> Homo sapiens

<400> 1278

Val Lys Ala Ser Ala Glu Thr Pro Arg Pro Gln Pro Val Asp Lys Leu
1 5 10 15

Glu Lys Ile Leu Glu Lys Leu Leu Thr Arg Phe Pro Gln Cys Asn Lys
20 25 30

Ala Gln Met Thr Asn Ile Leu Gln Gln Ile Lys Thr Ala Arg Thr Thr 35 40 45

Met Ala Gly Leu Thr Met Glu Glu Leu Ile Gln Leu Val Ala Ala Arg
50 55 60

1308

Leu Ala Glu His Glu Arg Val Ala Ala Ser Thr Gln Pro Leu Gly Arg
65 70 75 80

Ile Arg Ala Leu Phe Pro Ala Pro Leu Ala Gln Ile Ser Thr Pro Met 85 90 95

Phe Leu Pro Ser Ala Gln Val Ser Tyr Pro Gly Arg Ser Ser His Ala 100 105 110

Pro Ala Thr Cys Lys Leu Cys Leu Met Cys Gln Lys Leu Val Gln Pro 115 120 125

Ser Glu Leu His Pro Met Ala Cys Thr His Val Leu His Lys Glu Cys 130 135 140

Ile Lys Phe Trp Ala Gln Thr Asn Thr Asn Asp Thr Cys Pro Phe Cys 145 150 155 160

Pro Thr Leu Lys

<210> 1279

<211> 469

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (81)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1279

Pro Val Ala Val Gly Arg Val Arg Val Thr Ala Glu Gly Arg Xaa Met

1 10 15

Val Leu Gln Thr Thr Lys Gly Leu Arg Leu Leu Phe Asp Gly Asp Ala 20 25 30

His Leu Leu Met Ser Ile Pro Ser Pro Phe Arg Gly Arg Leu Cys Gly
35 40 45

Leu Cys Gly Asn Phe Asn Gly Asn Trp Ser Asp Phe Val Leu Pro 50 55 60

Asn 65	Gly	Ser	Ala	Ala	Ser 70	Ser	Val	Glu	Thr	Phe 75	Gly	Ala	Ala	Trp	Arg 80
Xaa	Pro	Gly	Ser	Ser 85	Lys	Gly	Cys	Gly	Glu 90	Gly	Cys	Gly	Pro	Gln 95	Gly
Cys	Pro	Val	Cys 100	Leu	Ala	Glu	Glu	Thr 105	Ala	Pro	Tyr	Glu	Ser 110	Asn	Glu
Ala	Cys	Gly 115	Gln	Leu	Arg	Asn	Pro 120	Gln	Gly	Pro	Phe	Ala 125	Thr	Cys	Gln
Ala	Val 130	Leu	Ser	Pro	Ser	Glu 135	Tyr	Phe	Arg	Gln	Cys 140	Val	Tyr	Asp	Leu
Cys 145	Ala	Gln	Lys	Gly	Asp 150	Lys	Ala	Phe	Leu	Cys 155	Arg	Ser	Leu	Ala	Ala 160
Tyr	Thr	Ala	Ala	Cys 165	Gln	Ala	Ala	Gly	Val 170	Ala	Val	Lys	Pro	Trp 175	Arg
Thr	Asp	Ser	Phe 180	Cys	Pro	Leu	His	Cys 185	Pro	Ala	His	Ser	His 190	Tyr	Ser
Ile	Cys	Thr 195	Arg	Thr	Cys	Gln	Gly 200	Ser	Cys	Ala	Ala	Leu 205	Ser	Gly	Leu
Thr	Gly 210	Cys	Thr	Thr	Arg	Cys 215	Phe	Glu	Gly	Cys	Glu 220	Cys	Asp	Asp	Arg
Phe 225	Leu	Leu	Ser	Gln	Gly 230	Val	Cys	Ile	Pro	Val 235	Gln	Asp	Cys	Gly	Cys 240
Thr	His	Asn	Gly	Arg 245	Tyr	Leu	Pro	Val	Asn 250	Ser	Ser	Leu	Leu	Thr 255	Ser
Asp	Cys	Ser	Glu 260	Arg	Cys	Ser	Cys	Ser 265	Ser	Ser	Ser	Gly	Leu 270	Thr	Cys
Gln	Ala	Ala 275	Gly	Cys	Pro	Pro	Gly 280	Arg	Val	Cys	Glu	Val 285	Lys	Ala	Glu
Ala	Arg 290	Asn	Cys	Trp	Ala	Thr 295	Arg	Gly	Leu	Cys	Val 300	Leu	Ser	Val	Gly
Ala 305	Asn	Leu	Thr	Thr	Phe 310	Asp	Gly	Ala	Arg	Gly 315	Ala	Thr	Thr	Ser	Pro 320
Gly	Val	Tyr	Glu	Leu 325	Ser	Ser	Arg	Cys	Pro 330	Gly	Leu	Gln	Asn	Thr 335	Ile

1310

Pro Trp Tyr Arg Val Val Ala Glu Val Gln Ile Cys His Gly Lys Thr 345 340 Glu Ala Val Gly Gln Val His Ile Phe Phe Gln Asp Gly Met Val Thr Leu Thr Pro Asn Lys Gly Val Trp Val Asn Gly Leu Arg Val Asp Leu 370 375 Pro Ala Glu Lys Leu Ala Ser Val Ser Val Ser Arg Thr Pro Asp Gly 390 395 Ser Leu Leu Val Arg Gln Lys Ala Gly Val Gln Val Trp Leu Gly Ala 410 Asn Gly Lys Val Ala Val Ile Val Ser Asn Asp His Ala Gly Lys Leu 420 425 430 Cys Gly Ala Cys Gly Asn Phe Asp Gly Asp Gln Thr Asn Asp Trp His 435 Asp Ser Gln Glu Lys Pro Ala Met Glu Lys Trp Arg Ala Gln Asp Phe 460 455 Ser Pro Cys Tyr Gly 465 <210> 1280 <211> 223 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (216) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (217) <223> Xaa equals any of the naturally occurring L-amino acids Gly Pro Arg Ala Leu Trp Pro Pro Pro Glu Val Gly Trp Gly Cys Ser 10 Pro Asn Pro Thr Leu Leu Pro Pro Leu Ser His Phe Pro Leu Leu Arg

25

1311

Trp Gly Thr Asn Asn Lys Glu Leu Thr Leu Pro Ala Pro Asn Pro Pro 35 40 Pro Ala Pro Pro Cys Pro Pro Arg Phe Trp Phe His Phe Ser Ser Val His Lys Leu Pro Leu Asp Ser Cys Val Val Phe Cys Ser Met Phe His 70 75 Ser Ser Thr Ser Val Ile Ala Ala Thr Ser Ala Lys Cys Ser Ser 85 90 Ser Leu Pro Pro Val Leu Pro Thr Ile Pro Ser Pro Lys Ile Leu Phe 100 105 Val Gly Lys Arg Gly Trp Gly Met Ala Gly Trp Val Thr Asp Tyr Pro 115 120 Ser Pro Arg Glu Gly Gly Ala Leu Pro Leu Gly Cys Cys Ser Arg Val Ser Lys Gly Ala Arg Ile Asp His Lys Gly Cys Arg Gly His Leu Leu 150 155 Pro Leu Phe Cys Trp Gly Gly Val Ala Met Ile Cys Pro Ser Leu Gly 165 170 Leu Pro Leu Trp Phe Pro Ile Cys Ser Tyr Leu Asn Lys Lys Asn Ile 180 185 Lys Lys Lys Lys Lys Lys Xaa Xaa Gly Gly Ala Pro Pro Pro 210 215 <210> 1281 <211> 37 <212> PRT <213> Homo sapiens <220>

<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1281
Thr Gln Ser Lys Trp Arg Leu Glu Val Gln Cys Gly Lys Glu Lys Gln
1 5 10 15

1312

Val Phe Ile Glu Ser Thr Asn Ser Thr Pro Phe Lys Asn Phe Xaa Gly
20 25 30

Thr Gln Pro Lys Gly
35

<210> 1282

<211> 458

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (249)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1282

Gly Pro Gln Arg Leu Ser Pro Gly Ala Met Leu Pro Ala Ala Thr Ala 1 5 10 15

Ser Leu Leu Gly Pro Leu Leu Thr Ala Cys Ala Leu Leu Pro Phe Ala 20 25 30

Gln Gly Gln Thr Pro Asn Tyr Thr Arg Pro Val Phe Leu Cys Gly Gly
35 40 45

Asp Val Lys Gly Glu Ser Gly Tyr Val Ala Ser Glu Gly Phe Pro Asn 50 55 60

Leu Tyr Pro Pro Asn Lys Glu Cys Ile Trp Thr Ile Thr Val Pro Glu 65 70 75 80

Gly Gln Thr Val Ser Leu Ser Phe Arg Val Phe Asp Leu Glu Leu His
85 90 95

Pro Ala Cys Arg Tyr Asp Ala Leu Glu Val Phe Ala Gly Ser Gly Thr
100 105 110

Ser Gly Gln Arg Leu Gly Arg Phe Cys Gly Thr Phe Arg Pro Ala Pro 115 120 125

Leu Val Ala Pro Gly Asn Gln Val Thr Leu Arg Met Thr Thr Asp Glu 130 135 140

Gly Thr Gly Gly Arg Gly Phe Leu Leu Trp Tyr Ser Gly Arg Ala Thr 145 150 155 160

Ser Gly Thr Glu His Gln Phe Cys Gly Gly Arg Leu Glu Lys Ala Gln

170 165 175 Gly Thr Leu Thr Thr Pro Asn Trp Pro Glu Ser Asp Tyr Pro Pro Gly 180 185 Ile Ser Cys Ser Trp His Ile Ile Ala Pro Pro Asp Gln Val Ile Ala 200 Leu Thr Phe Glu Lys Phe Asp Leu Glu Pro Asp Thr Tyr Cys Arg Tyr 215 Asp Ser Val Ser Val Phe Asn Gly Ala Val Ser Asp Asp Ser Arg Arg 235 Leu Gly Lys Phe Cys Gly Asp Ala Xaa Pro Gly Ser Ile Ser Ser Glu 250 Gly Asn Glu Leu Leu Val Gln Phe Val Ser Asp Leu Ser Val Thr Ala 260 265 Asp Gly Phe Ser Ala Ser Tyr Lys Thr Leu Pro Arg Gly Thr Ala Lys 275 280 Glu Gly Gln Gly Pro Gly Pro Lys Arg Gly Thr Glu Pro Lys Val Lys Leu Pro Pro Lys Ser Gln Pro Pro Glu Lys Thr Glu Glu Ser Pro Ser 315 Ala Pro Asp Ala Pro Thr Cys Pro Lys Gln Cys Arg Arg Thr Gly Thr 330 325 Leu Gln Ser Asn Phe Cys Ala Ser Ser Leu Val Val Thr Ala Thr Val 345 Lys Ser Met Val Arg Glu Pro Gly Glu Gly Leu Ala Val Thr Val Ser 355 360 365 Leu Ile Gly Ala Tyr Lys Thr Gly Gly Leu Asp Leu Pro Ser Pro Pro 370 Thr Gly Ala Ser Leu Lys Phe Tyr Val Pro Cys Lys Gln Cys Pro Pro 390 395 Met Lys Lys Gly Val Ser Tyr Leu Leu Met Gly Gln Val Glu Glu Asn 405 410 Arg Gly Pro Val Leu Pro Pro Glu Ser Phe Val Val Leu His Arg Pro 425 Asn Gln Asp Gln Ile Leu Thr Asn Leu Ser Lys Arg Lys Cys Pro Ser

1314

445 435 440 Gln Pro Val Arg Ala Ala Ala Ser Gln Asp 450 455 <210> 1283 <211> 229 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (45) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (154) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (155) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1283 Cys Arg Ala Pro Leu Gly Ala Gly Leu Ser Pro Ala Val Arg Arg Gln Glu Pro Pro Phe Pro Leu Gly Val Thr Arg Gly Trp Gly Arg Trp Pro 20 Ile Gln Lys Arg Arg Glu Gly Ala Arg Pro Val Pro Xaa Ser Glu Arg 40 Ser Gln Glu Asp Gly Arg Gly Pro Ala Ala Arg Ser Ser Gly Thr Leu 55 Trp Arg Ile Arg Thr Arg Leu Ser Leu Cys Arg Asp Pro Glu Pro Pro 75 65 70 Pro Pro Leu Cys Leu Leu Arg Val Ser Leu Leu Cys Ala Leu Arg Ala Gly Gly Arg Gly Ser Arg Trp Gly Glu Asp Gly Ala Arg Leu Leu 100 105

Leu Pro Pro Ala Arg Ala Ala Gly Asn Gly Glu Ala Glu Pro Ser Gly

120

115

1315

Gly Pro Ser Tyr Ala Gly Arg Met Leu Glu Ser Ser Gly Cys Lys Ala 130 135 140

Leu Lys Glu Gly Val Leu Glu Lys Arg Xaa Xaa Gly Cys Cys Ser Ser 145 150 155 160

Gly Arg Lys Ser Val Ala Ser Ser Pro Arg Lys Gly Cys Cys Leu Ser 165 170 175

Arg Pro Ser Ser Cys Asn Thr Ser Ser Ser Ser Asn Ser Ser Ser Ser Ser 180

Ser Ser Asn Asn Ser Pro Gly Arg Gly Arg Pro Ser Arg Pro Asn Pro 195 200 205

Val Ala Pro Leu Ser Pro Ala Ser Ser Arg Arg Ser Ser Ser Arg Asn 210 215 220

Cys Thr Ser Pro Thr 225

<210> 1284

<211> 390

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1284

Thr Ser Val Ala Ala Ala Ala Ala Arg Gly Arg Ala Gly Cys Pro Leu
1 5 10 15

Thr Ala Ala Ser Ala Ala Arg Phe Lys Met Ala Ala Cys Ser His Ser
'20 25 30

Phe Ser Ala Glu Arg Leu Leu Thr Phe Ile Val Phe Ser Ala Arg Phe 35 40 45

Asp Arg Leu Xaa Pro Ala Ala Leu Ser Gly Ile Phe Tyr Gln Ala Glu 50 55 60

Met His Arg Thr Thr Arg Ile Lys Ile Thr Glu Leu Asn Pro His Leu 65 70 75 80

Met Cys Val Leu Cys Gly Gly Tyr Phe Ile Asp Ala Thr Thr Ile Ile

95 90 85 Glu Cys Leu His Ser Phe Cys Lys Thr Cys Ile Val Arg Tyr Leu Glu 105 Thr Ser Lys Tyr Cys Pro Ile Cys Asp Val Gln Val His Lys Thr Arg 120 Pro Leu Leu Asn Ile Arg Ser Asp Lys Thr Leu Gln Asp Ile Val Tyr 135 Lys Leu Val Pro Gly Leu Phe Lys Asn Glu Met Lys Arg Arg Arg Asp 155 150 Phe Tyr Ala Ala His Pro Ser Ala Asp Ala Ala Asn Gly Ser Asn Glu 170 Asp Arg Gly Glu Val Ala Asp Glu Asp Lys Arg Ile Ile Thr Asp Asp 185 Glu Ile Ile Ser Leu Ser Ile Glu Phe Phe Asp Gln Asn Arg Leu Asp 195 200 Arg Lys Val Asn Lys Asp Lys Glu Lys Ser Lys Glu Glu Val Asn Asp 215 Lys Arg Tyr Leu Arg Cys Pro Ala Ala Met Thr Val Met His Leu Arg 230 235 Lys Phe Leu Arg Ser Lys Met Asp Ile Pro Asn Thr Phe Gln Ile Asp 245 250 Val Met Tyr Glu Glu Glu Pro Leu Lys Asp Tyr Tyr Thr Leu Met Asp 265 Ile Ala Tyr Ile Tyr Thr Trp Arg Arg Asn Gly Pro Leu Pro Leu Lys 275 280 Tyr Arg Val Arg Pro Thr Cys Lys Arg Met Lys Ile Ser His Gln Arg Asp Gly Leu Thr Asn Ala Gly Glu Leu Glu Ser Asp Ser Gly Ser Asp 310 315 Lys Ala Asn Ser Pro Ala Gly Gly Ile Pro Ser Thr Ser Ser Cys Leu 325 330 Pro Ser Pro Ser Thr Pro Val Gln Ser Pro His Pro Gln Phe Pro His 340 345 Ile Ser Ser Thr Met Asn Gly Thr Ser Asn Ser Pro Ser Gly Asn His

1317

360 365 355 Gln Ser Ser Phe Ala Asn Arg Pro Arg Lys Ser Ser Val Asn Gly Ser 370 375 Ser Ala Thr Ser Ser Gly 385 390 <210> 1285 <211> 39 <212> PRT <213> Homo sapiens <400> 1285 His Ala Ser Ala Gly Ser Gln Leu Phe Glu Met His Glu Lys Leu Ser 10 Cys Met Ala Asn Ser Val Ile Lys Asn Leu Gln Ser Arg Trp Arg Ser 25 Pro Ser His Glu Asn Ser Ile 35 <210> 1286 <211> 453 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (38) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (101) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (110) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (286) <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1286

Arg 1	Arg	Ser	Val	Ile 5	Cys	Asp	Ser	Asn	Ala 10	Thr	Ala	Leu	Glu	Leu 15	Pro
Gly	Leu	Pro	Leu 20	Ser	Leu	Pro	Gln	Pro 25	Ser	Ile	Pro	Ala	Ala 30	Val	Pro
Gln	Ser	Ala 35	Pro	Pro	Xaa	Pro	His 40	Arg	Glu	Glu	Thr	Val 45	Thr	Ala	Th:
Ala	Thr 50	Ser	Gln	Val	Ala	Gln 55	Gln	Pro	Pro	Ala	Ala 60	Ala	Ala	Pro	Gl
Glu 65	Gln	Ala	Val	Ala	Gly 70	Pro	Ala	Pro	Arg	Leu 75	Ser	Pro	Ala	Val	Pro
Ala	Lys	Thr	Ala	Gln 85	Cys	Pro	Ser	Leu	Ala 90	Leu	Trp	Gly	Ala	Lys 95	Ar
Ser	Arg	Arg	Arg 100	Xaa	Lys	Val	Ala	Ala 105	Ala	Ala	Gln	Ala	Xaa 110	Lys	Glı
Pro	Gln	Glu 115	Glu	Arg	Ser	Gln	Gln 120	Gln	Asp	Asp	Ile	Glu 125	Glu	Leu	Gli
Thr	Lys 130	Ala	Val	Gly	Met	Ser 135	Asn	Asp	Gly	Arg	Phe 140	Leu	Lys	Phe	Asj
Ile 145	Glu	Ile	Gly	Arg	Gly 150	Ser	Phe	Lys	Thr	Val 155	Tyr	Lys	Gly	Leu	Ası 160
Thr	Glu	Thr	Thr	Val 165	Glu	Val	Ala	Trp	Cys 170	Glu	Leu	Gln	Asp	Arg 175	Ly
Leu	Thr	Lys	Ser 180	Glu	Arg	Gln	Arg	Phe 185	Lys	Glu	Glu	Ala	Glu 190	Met	Le
Lys	Gly	Leu 195	Gln	His	Pro	Asn	Ile 200	Val	Arg	Phe	Tyr	Asp 205	Ser	Trp	Glı
Ser	Thr 210	Val	Lys	Gly	Lys	Lys 215	Cys	Ile	Val	Leu	Val 220	Thr	Glu	Leu	Met
Thr 225	Ser	Gly	Thr	Leu	Lys 230	Thr	Tyr	Leu	Lys	Arg 235	Phe	Lys	Val	Met	Lys 240
Ile	Lys	Val	Leu	Arg 245	Ser	Trp	Cys	Arg	Gln 250	Ile	Leu	Lys	Gly	Leu 255	Gli
Phe	Leu	His	Thr	Arg	Thr	Pro	Pro	Ile	Ile	His	Arg	Asp	Leu	Lys	Суя

1319

260 265 270 Asp Asn Ile Phe Ile Thr Gly Pro Thr Gly Ser Val Lys Xaa Gly Asp 280 275 Leu Gly Leu Ala Thr Leu Lys Arg Ala Ser Phe Ala Lys Ser Val Ile 295 300 Gly Thr Pro Glu Phe Met Ala Pro Glu Met Tyr Glu Glu Lys Tyr Asp 310 315 Glu Ser Val Asp Val Tyr Ala Phe Gly Met Cys Met Leu Glu Met Ala 325 330 Thr Ser Glu Tyr Pro Tyr Ser Glu Cys Gln Asn Ala Ala Gln Ile Tyr 345 Arg Arg Val Thr Ser Gly Val Lys Pro Ala Ser Phe Asp Lys Val Ala 360 365 Ile Pro Glu Val Lys Glu Ile Ile Glu Gly Cys Ile Arg Gln Asn Lys 370 375 Asp Glu Arg Tyr Ser Ile Lys Asp Leu Leu Asn His Ala Phe Phe Gln 395

Lys Ile Ala Ile Lys Leu Trp Leu Arg Ile Glu Asp Ile Lys Lys Leu

425

Glu Glu Thr Gly Val Arg Val Glu Leu Ala Glu Glu Asp Asp Gly Glu

410

430

Asn Thr His Arg Ala 450

405

420

<210> 1287

<211> 450

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<221> SITE
<222> (41)
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1287
Ala Ala Glu Val Leu Cys Pro Ser Cys Phe Pro Ile Ser Pro Ala Pro
                  5
                                     10
                                                          15
Trp Met Thr Val Gly Pro Ala Ser Ala Leu Phe Pro Cys Gln Thr Pro
             20
Xaa Phe Pro Trp Thr Glu Trp Asn Xaa Trp Xaa Phe Thr Ala His Val
                             40
Leu Ser Gln Lys Phe Glu Lys Glu Leu Ser Lys Val Arg Glu Tyr Val
     50
                         55
                                              60
Gln Leu Ile Ser Val Tyr Glu Lys Lys Leu Leu Asn Leu Thr Val Arg
65
                     70
Ile Asp Ile Met Glu Lys Asp Thr Ile Ser Tyr Thr Glu Leu Asp Phe
```

				85					90					95	
Glu	Leu	Ile	Lys 100	Val	Glu	Val	Lys	Glu 105	Met	Glu	Lys	Leu	Val 110	Ile	Glı
Leu	Lys	Glu 115	Xaa	Phe	Gly	Gly	Ser 120	Ser	Glu	Ile	Val	Asp 125	Gln	Leu	Glu
Val	Glu 130	Ile	Arg	Asn	Met	Thr 135	Leu	Leu	Val	Glu	Lys 140	Leu	Glu	Thr	Let
Asp 145	Lys	Asn	Asn	Val	Leu 150	Ala	Ile	Arg	Arg	Glu 155	Ile	Val	Ala	Leu	Lys 160
Thr	Lys	Leu	Lys	Glu 165	Cys	Glu	Ala	Ser	Lys 170	Asp	Gln	Asn	Thr	Pro 175	Va:
Val	His	Pro	Pro 180	Pro	Thr	Pro	Gly	Ser 185	Cys	Gly	His	Gly	Gly 190	Val	Va:
Xaa	Ile	Ser 195	Lys	Pro	Ser	Val	Val 200	Gln	Leu	Asn	Trp	Arg 205	Gly	Phe	Sei
Tyr	Leu 210	Tyr	Gly	Ala	Trp	Gly 215	Arg	Asp	Tyr	Ser	Pro 220	Gln	His	Pro	Ası
Lys 225	Gly	Leu	Tyr	Trp	Val 230	Ala	Pro	Leu	Asn	Thr 235	Asp	Gly	Arg	Leu	Let 240
Glu	Tyr	Tyr	Arg	Leu 245	Tyr	Asn	Thr	Leu	Asp 250	Asp	Leu	Leu	Leu	Tyr 255	Ile
Asn	Ala	Arg	Glu 260	Leu	Arg	Ile	Thr	Tyr 265	Gly	Gln	Gly	Ser	Gly 270	Thr	Ala
Val	Tyr	Asn 275	Asn	Asn	Met	туr	Val 280	Asn	Met	Tyr	Asn	Thr 285	Gly	Asn	Ile
Ala	Arg 290	Val	Asn	Leu	Thr	Thr 295	Asn	Thr	Ile	Ala	Val 300	Thr	Gln	Thr	Let
Pro 305	Asn	Ala	Ala	Tyr	Asn 310	Asn	Arg	Phe	Xaa	Tyr 315	Ala	Asn	Val	Ala	Trp 320
Gln	Asp	Ile	Asp	Phe 325	Xaa	Val	Asp	Glu	Asn 330	Gly	Leu	Trp	Val	Ile 335	туг
Ser	Thr	Glu	Ala 340	Ser	Thr	Gly	Xaa	Met 345	Val	Ile	Ser	Lys	Leu 350	Asn	Asp
πh~	Thr	Len	Glr	1727	Lou	Acr	Thr.	Trr	Tree	Thr	T.ve	Glr	ጥህተ	T.ve	Dro

1322

365 355 360 Ser Ala Ser Asn Ala Phe Met Val Cys Gly Val Leu Tyr Ala Thr Arg 370 375 Thr Met Asn Thr Arg Thr Glu Glu Ile Phe Tyr Tyr Tyr Asp Thr Asn 390 395 Thr Gly Lys Glu Gly Lys Leu Asp Ile Val Met His Lys Met Gln Glu 410 Lys Val Gln Ser Ile Asn Tyr Asn Pro Phe Asp Gln Lys Leu Tyr Val 420 425 Tyr Asn Asp Gly Tyr Leu Leu Asn Tyr Asp Leu Ser Val Leu Gln Lys 440 445 Pro Gln 450 <210> 1288 <211> 164 <212> PRT <213> Homo sapiens <400> 1288 Leu Gln Gln Ala Leu Pro Asn Asn Gly Leu Leu Phe Thr Trp Thr Leu 10 Ser Lys Glu Gly Gly Arg Glu Gly Gln Ser Gly Val Ser Phe Gln His 20 Ser Ser Gln Lys Gly Glu Arg Phe Ser Gly Trp Cys His Ala Ile Gly Ile Lys Gln Glu Ala His Gly Trp Leu Leu Asn Glu Glu Gln Asn Leu 55 Gly Ala Leu Trp Leu Thr Thr Ala Ile Cys Gly Ala Gly Thr His Thr 65 Ser Arg Gln Leu Gln Phe Cys Thr Phe Ser Leu Leu Asp Ser Lys Ser 85 90 Arg Cys Cys Leu Ala Ala Leu Arg Gly His Ser Leu Leu Arg Arg Ala 105

Leu Gln Ser Pro Ala Pro Gly Leu Gly Glu Trp Met Arg Leu Leu Pro

120

1323

Tyr Asp Thr Cys Gln Asp Ala Leu Pro Pro Pro Leu Lys Val Gly Pro 130 135 140

Gly Gln His Cys Ser Leu Leu Ser Ala Phe Ser Gly Leu Arg Ser Gln 145 150 155 160

Tyr Glu Leu Pro

<210> 1289

<211> 40

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1289

Trp Met Ser Glu Tyr Xaa Gln Trp Val Phe Leu Ile Ser Leu Arg Ile
1 5 10 15

Cys Leu Arg Val His Tyr Gln Gly Ile Ser Gly Thr Arg Xaa His Ser 20 25 30

Leu His Gln Phe Leu Arg Val Leu 35 40

<210> 1290

<211> 266

<212> PRT

<213> Homo sapiens

<400> 1290

Asp Ile Met Glu Ser Gly Phe Thr Ser Lys Asp Thr Tyr Leu Ser His 1 5 10 15

Phe Asn Pro Arg Asp Tyr Leu Glu Lys Tyr Tyr Lys Phe Gly Ser Arg 20 25 30

1324

His Ser Ala Glu Ser Gln Ile Leu Lys His Leu Leu Lys Asn Leu Phe 35 40 Lys Ile Phe Cys Leu Asp Gly Val Lys Gly Asp Leu Leu Ile Asp Ile Gly Ser Gly Pro Thr Ile Tyr Gln Leu Leu Ser Ala Cys Glu Ser Phe 70 Lys Glu Ile Val Val Thr Asp Tyr Ser Asp Gln Asn Leu Gln Glu Leu 85 90 Glu Lys Trp Leu Lys Lys Glu Pro Glu Ala Phe Asp Trp Ser Pro Val 105 Val Thr Tyr Val Cys Asp Leu Glu Gly Asn Arg Val Lys Gly Pro Glu 115 120 Lys Glu Glu Lys Leu Arg Gln Ala Val Lys Gln Val Leu Lys Cys Asp 135 Val Thr Gln Ser Gln Pro Leu Gly Ala Val Pro Leu Pro Pro Ala Asp 150 155 Cys Val Leu Ser Thr Leu Cys Leu Asp Ala Ala Cys Pro Asp Leu Pro 165 170 Thr Tyr Cys Arg Ala Leu Arg Asn Leu Gly Ser Leu Leu Lys Pro Gly 180 185 Gly Phe Leu Val Ile Met Asp Ala Leu Lys Ser Ser Tyr Tyr Met Ile

Gly Glu Gln Lys Phe Ser Ser Leu Pro Leu Gly Arg Glu Ala Val Glu 210 215 220

200

Ala Ala Val Lys Glu Ala Gly Tyr Thr Ile Glu Trp Phe Glu Val Ile
225 230 235 240

Ser Gln Ser Tyr Ser Ser Thr Met Ala Asn Asn Glu Gly Leu Phe Ser 245 250 255

Leu Val Ala Arg Lys Leu Ser Arg Pro Leu 260 265

<210> 1291

<211> 112

<212> PRT

<213> Homo sapiens

1325

<220> <221> SITE <222> (55) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1291 Cys Gly Ser Thr Ile Leu Gln Gly Pro Gln Lys Ala Leu Arg Arg Gly 10 Leu Gly Glu Val Gly Asp Gln Gly Lys Ser Arg Gln Arg Ala Ser Lys 25 Arg Leu Phe Ala Ser Lys Ala Leu Arg Gly His Leu Arg Pro Val Arg Gly Gln Gln Pro Gly Arg Xaa Gly Ser Asp Glu Asn Glu Glu Ser Ser Val Val Asp Tyr Val Glu Val Thr Val Gly Glu Asp Ala Ile Ser 75 70 Asp Arg Ser Asp Ser Trp Ser Gln Ala Ala Ala Glu Gly Val Ser Glu 85 Leu Ala Glu Ser Asp Ser Asp Cys Val Pro Ala Glu Ala Gly Gln Ala 100 105 110

<210> 1292 <211> 217 <212> PRT <213> Homo sapiens

<400> 1292

Gly Ser Thr His Ala Ser Gly Thr Met Arg Ala Ala Ala Ile Ser Thr 1 5 10 15

Pro Lys Leu Asp Lys Met Pro Gly Met Phe Phe Ser Ala Asn Pro Lys 20 25 30

Glu Leu Lys Gly Thr Thr His Ser Leu Leu Asp Asp Lys Met Gln Lys 35 40 45

Arg Arg Pro Lys Thr Phe Gly Met Asp Met Lys Ala Tyr Leu Arg Ser 50 60

1326

Met Ile Pro His Leu Glu Ser Gly Met Lys Ser Ser Lys Ser Lys Asp 70 75 Val Leu Ser Ala Ala Glu Val Met Gln Trp Ser Gln Ser Leu Glu Lys 90 Leu Leu Ala Asn Gln Thr Gly Gln Asn Val Phe Gly Ser Phe Leu Lys 105 Ser Glu Phe Ser Glu Glu Asn Ile Glu Phe Trp Leu Ala Cys Glu Asp 115 120 Tyr Lys Lys Thr Glu Ser Asp Leu Leu Pro Cys Lys Ala Glu Glu Ile 135 Tyr Lys Ala Phe Val His Ser Asp Ala Ala Lys Gln Ile Asn Ile Asp 155 145 150 Phe Arg Thr Arg Glu Ser Thr Ala Lys Lys Ile Lys Ala Pro Thr Pro 165 170 Thr Cys Phe Asp Glu Ala Gln Lys Val Ile Tyr Thr Leu Met Glu Lys 185 Asp Ser Tyr Pro Arg Phe Leu Lys Ser Asp Ile Tyr Leu Asn Leu Leu 200 205 195 Asn Asp Leu Gln Ala Asn Ser Leu Lys 215 210 <210> 1293 <211> 235 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (229) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1293 Leu His Leu Leu Ala Val Leu Glu Lys Met Ile Ser Gln Gly Asn Asn 10

Asn Lys Asn Gly Lys Asn Glu Thr Gly Asn Asn Asn Asn Lys Asp Gly 25

Ser Asn His Lys Ala Glu Ser Gly Ala Leu Ile Glu Ala Ala Lys Ser 40

1327

Lys Ile His Gln Tyr Lys Val Arg Ala Tyr Ile Gln Met Lys Ser Leu 55 Lys Ala Cys Lys Arg Glu Ile Lys Ser Val Met Asn Thr Ala Gly Asn 70 Ser Ala Pro Ser Leu Phe Leu Lys Ser Asn Phe Glu Tyr Leu Arg Gly 85 90 Asn Tyr Arg Lys Ala Val Lys Leu Leu Asn Ser Ser Asn Ile Ala Glu 100 105 His Pro Gly Phe Met Lys Thr Gly Glu Cys Leu Arg Cys Met Phe Trp 115 120 Asn Asn Leu Gly Cys Ile His Phe Ala Met Ser Lys His Asn Leu Gly 135 Ile Phe Tyr Phe Lys Lys Ala Leu Gln Glu Asn Asp Asn Val Cys Ala 150 155 Gln Leu Ser Ala Gly Ser Thr Asp Pro Gly Lys Lys Phe Ser Gly Arg 165 170 Pro Met Cys Thr Leu Leu Thr Asn Lys Arg Tyr Glu Leu Leu Tyr Asn 180 185 Cys Gly Ile Gln Leu Leu His Ile Gly Arg Pro Leu Ala Ala Phe Glu 200 Cys Leu Ile Glu Ala Val Gln Val Tyr His Ala Asn Pro Arg Leu Trp 215 210 Leu Arg Leu Ala Xaa Met Leu His Cys Cys Gln 225 230 235

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<210> 1294
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<211> 275

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (23)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

WO 00/55350

<22	2> (49)													
<22	3> X	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-ai	mino	acio	ds
<22	0>														
<22	1> s	ITE													
<22	2> (50)													
			qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-aı	mino	acio	ds
<40	0> 1:	294													
			Ala	Arg 5	Gly	Arg	Ala	Leu	Pro 10	Ala	Ser	Gly	Lys	Ala 15	Gl
Arg	Ala	Arg	Gly 20	Ser	Ala	Xaa	Gly	Ser 25	Ala	Ala	Arg	Gly	His 30	Trp	Sei
Leu	Ala	Arg 35	Phe	Pro	Ala	Pro	Arg 40	Gly	Ser	His	Leu	Pro 45	Ala	Arg	Ar
Xaa	Xaa 50	Gly	Arg	Val	Ser	Thr 55	Pro	Ile	Leu	Arg	Pro 60	Val	Ser	Ser	Ile
Pro 65	Leu	Ala	Leu	Ser	Arg 70	Glu	Ser	Arg	Thr	Ala 75	Glu	Glu	Ser	Ser	Lei 80
Thr	Pro	Gln	Pro	Gln 85	Val	Gly	Leu	Val	His 90	Ile	Met	Thr	Ser	Phe 95	Glu
Asp	Ala	Asp	Thr 100	Glu	Glu	Thr	Val	Thr 105	Cys	Leu	Gln	Met	Thr 110	Val	ту
His	Pro	Gly 115	Gln	Leu	Gln	Cys	Gly 120	Ile	Phe	Gln	Ser	Ile 125	Ser	Phe	Ası
Arg	Glu 130	Lys	Leu	Pro	Ser	Ser 135	Glu	Val	Val	Lys	Phe 140	Gly	Arg	Asn	Sei
Asn 145	Ile	Cys	His	Tyr	Thr 150	Phe	Gln	Asp	Lys	Gln 155	Val	Ser	Arg	Val	Gl:
Phe	Ser	Leu	Gln	Leu 165	Phe	Lys	Lys	Phe	Asn 170	Ser	Ser	Val	Leu	Ser 175	Phe
Glu	Ile	Lys	Asn 180	Met	Ser	Lys	Lys	Thr 185	Asn	Leu	Ile	Val	Asp 190	Ser	Arg
Glu	Leu	Gly 195	Tyr	Leu	Asn	Lys	Met 200	Asp	Leu	Pro	Tyr	Arg 205	Cys	Met	Va.
Arg	Phe 210	Gly	Glu	Tyr	Gln	Phe 215	Leu	Met	Glu	Lys	Glu 220	Asp	Gly	Glu	Sei

1329

Leu Glu Phe Phe Glu Thr Gln Phe Ile Leu Ser Pro Arg Ser Leu Leu 225 230 235 Gln Glu Asn Asn Trp Pro Pro His Arg Pro Ile Pro Glu Tyr Gly Thr 245 250 Tyr Ser Leu Cys Ser Ser Gln Ser Ser Pro Thr Glu Met Asp Glu 265 Asn Glu Ser 275 <210> 1295 <211> 677 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (144) <223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (161)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1295

Met Thr Arg Leu Pro Lys Leu Trp Ala Arg Pro Ala Gly Lys Ala Leu 1 5 10 15

Val Ser Pro Val Val Gln Asn Ile Thr Ser Pro Asp Glu Asp Gly Ile 20 25 30

Ser Pro Leu Gly Trp Leu Leu Asp Gln Tyr Leu Glu Cys Gln Glu Ala 35 40 45

Val Phe Asn Pro Gln Ser Arg Gly Pro Ala Phe Phe Ser Arg Val Arg
50 55 60

Arg Leu Thr His Leu Leu Val His Val Glu Pro Cys Glu Ala Pro Pro 65 70 75 80

Pro Val Val Ala Thr Pro Arg Pro Lys Gly Arg Asn Arg Ser His Asp 85 90 95

Trp Ser Ser Leu Ala Thr Arg Gly Leu Pro Ser Ser Ile Met Arg Asn 100 105 110

Leu	Thr	Arg 115	Cys	Trp	Arg	Ala	Val 120	Val	Glu	Lys	Gln	Val 125	Asn	Asn	Phe
Leu	Thr 130	Ser	Ser	Trp	Arg	Asp 135	Asp	Asp	Phe	Val	Pro 140	Arg	Tyr	Cys	Xaa
His 145	Phe	Asn	Ile	Leu	Gln 150	Asn	Ser	Ser	Ser	Glu 155	Leu	Phe	Gly	Pro	Arg 160
Xaa	Ala	Phe	Leu	Leu 165	Ala	Leu	Gln	Asn	Gly 170	Cys	Ala	Gly	Ala	Leu 175	Leu
Lys	Leu	Pro	Phe 180	Leu	Lys	Ala	Ala	His 185	Val	Ser	Glu	Gln	Phe 190	Ala	Arg
His	Ile	Asp 195	Gln	Gln	Ile	Gln	Gly 200	Ser	Arg	Ile	Gly	Gly 205	Ala	Gln	Glu
Met	Glu 210	Arg	Leu	Ala	Gln	Leu 215	Gln	Gln	Cys	Leu	Gln 220	Ala	Val	Leu	Ile
Phe 225	Ser	Gly	Leu	Glu	Ile 230	Ala	Thr	Thr	Phe	Glu 235	His	Tyr	Tyr	Gln	His 240
Tyr	Met	Ala	Asp	Arg 245	Leu	Leu	Gly	Val	Val 250	Ser	Ser	Trp	Leu	Glu 255	Gly
Ala	Val	Leu	Glu 260	Gln	Ile	Gly	Pro	Cys 265	Phe	Pro	Asn	Arg	Leu 270	Pro	Gln
Gln	Met	Leu 275	Gln	Ser	Leu	Ser	Thr 280	Ser	Lys	Glu	Leu	Gln 285	Arg	Gln	Phe
His	Val 290	Tyr	Gln	Leu	Gln	Gln 295	Leu	Asp	Gln	Glu	Leu 300	Leu	Lys	Leu	Glu
Asp 305	Thr	Glu	Lys	Lys	Ile 310	Gln	Val	Gly	Leu	Gly 315	Ala	Ser	Gly	Lys	Glu 320
His	Lys	Ser	Glu	Lys 325	Glu	Glu	Glu	Ala	Gly 330	Ala	Ala	Ala	Val	Val 335	Asp
Val	Ala	Glu	Gly 340	Glu	Glu	Glu	Glu	Glu 345	Glu	Asn	Glu	Asp	Leu 350	Tyr	Tyr
Glu	Gly	Ala 355	Met	Pro	Glu	Val	Ser 360	Val	Leu	Val	Leu	Ser 365	Arg	His	Ser
Trp	Pro 370	Val	Ala	Ser	Ile	Cys 375	His	Thr	Leu	Asn	Pro 380	Arg	Thr	Cys	Leu

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Pro 385	Ser	туг	Leu	Arg	Gly 390	Thr	Leu	Asn	Arg	Туг 395	Ser	Asn	Phe	Tyr	Asn 400
Lys	Ser	Gln	Ser	His 405	Pro	Ala	Leu	Glu	Arg 410	Gly	Ser	Gln	Arg	Arg 415	Leu
Gln	Trp	Thr	Trp 420	Leu	Gly	Trp	Ala	Glu 425	Leu	Gln	Phe	Gly	Asn 430	Gln	Thr
Leu	His	Val 435	Ser	Thr	Val	Gln	Met 440	Trp	Leu	Leu	Leu	Tyr 445	Leu	Asn	Asp
Leu	Lys 450	Ala	Val	Ser	Val	Glu 455	Ser	Leu	Leu	Ala	Phe 460	Ser	Gly	Leu	Ser
Ala 465	Asp	Met	Leu	Asn	Gln 470	Ala	Ile	Gly	Pro	Leu 475	Thr	Ser	Ser	Arg	Gly 480
Pro	Leu	Asp	Leu	His 485	Glu	Gln	Lys	Asp	Ile 490	Pro	Gly	Gly	Val	Leu 495	Lys
Ile	Arg	Asp	Gly 500	Ser	Lys	Glu	Pro	Arg 505	Ser	Arg	Trp	Asp	Ile 510	Val	Arg
Leu	Ile	Pro 515	Pro	Gln	Thr	Tyr	Leu 520	Gln	Ala	Glu	Gly	Glu 525	Asp	Gly	Gln
Asn	Leu 530	Glu	Lys	Arg	Arg	Asn 535	Leu	Leu	Asn	Cys	Leu 540	Ile	Val	Arg	Ile
Leu 545	Lys	Ala	His	Gly	Asp 550	Glu	Gly	Leu	His	Ile 555	Asp	Gln	Leu	Val	Cys 560
Leu	Val	Leu	Glu	Ala 565	Trp	Gln	Lys	Gly	Pro 570	Cys	Pro	Pro	Arg	Gly 575	Leu
Val	Ser	Ser	Leu 580	Gly	Lys	Gly	Ser	Ala 585	Cys	Ser	Ser	Thr	Asp 590	Val	Leu
Ser	Cys	Ile 595	Leu	His	Leu	Leu	Gly 600	Lys	Gly	Thr	Leu	Arg 605	Arg	His	Asp
Asp	Arg 610	Pro	Gln	Val	Leu	Ser 615	Tyr	Ala	Val	Pro	Val 620	Thr	Val	Met	Glu
Pro 625	His	Thr	Glu	Ser	Leu 630	Asn	Pro	Gly	Ser	Ser 635	Gly	Pro	Asn	Pro	Pro 640
Leu	Thr	Phe	His	Thr 645	Leu	Gln	Ile	Arg	Ser 650	Arg	Gly	Val	Pro	Tyr 655	Ala

1332

Ser Cys Thr Ala Thr Gln Ser Phe Ser Thr Ser Gly Ser Pro Arg Leu 660 665 670

Gly Val Arg Gly Arg 675

<210> 1296

<211> 578

<212> PRT

<213> Homo sapiens

<400> 1296

Gly Thr Arg Glu Gly Ala Arg Val Gly Gly Ala Arg Gly Gly Arg Asp 1 5 10 15

Gly Arg Lys Met Ala Thr Ala Thr Ile Ala Leu Gln Val Asn Gly Gln
20 25 30

Gln Gly Gly Ser Glu Pro Ala Ala Ala Ala Ala Val Val Ala Ala 35 40 45

Gly Asp Lys Trp Lys Pro Pro Gln Gly Thr Asp Ser Ile Lys Met Glu 50 55 60

Asn Gly Gln Ser Thr Ala Ala Lys Leu Gly Leu Pro Pro Leu Thr Pro
65 70 75 80

Glu Gln Gln Glu Ala Leu Gln Lys Ala Lys Lys Tyr Ala Met Glu Gln 85 90 95

Ser Ile Lys Ser Val Leu Val Lys Gln Thr Ile Ala His Gln Gln 100 105 110

Gln Leu Thr Asn Leu Gln Met Ala Ala Val Thr Met Gly Phe Gly Asp 115 120 125

Pro Leu Ser Pro Leu Gln Ser Met Ala Ala Gln Arg Gln Arg Ala Leu 130 135 140

Ala Ile Met Cys Arg Val Tyr Val Gly Ser Ile Tyr Tyr Glu Leu Gly
145 150 155 160

Glu Asp Thr Ile Arg Gln Ala Phe Ala Pro Phe Gly Pro Ile Lys Ser 165 170 175

Ile Asp Met Ser Trp Asp Ser Val Thr Met Lys His Lys Gly Phe Ala 180 185 190

Phe Val Glu Tyr Glu Val Pro Glu Ala Ala Gln Leu Ala Leu Glu Gln

Met Asn Ser Val Met Leu Gly Gly Arg Asn Ile Lys Val Gly Arg Pro Ser Asn Ile Gly Gln Ala Gln Pro Ile Ile Asp Gln Leu Ala Glu Glu Ala Arg Ala Phe Asn Arg Ile Tyr Val Ala Ser Val His Gln Asp Leu Ser Asp Asp Ile Lys Ser Val Phe Glu Ala Phe Gly Lys Ile Lys Ser Cys Thr Leu Ala Arg Asp Pro Thr Thr Gly Lys His Lys Gly Tyr Gly Phe Ile Glu Tyr Glu Lys Ala Gln Ser Ser Gln Asp Ala Val Ser Ser Met Asn Leu Phe Asp Leu Gly Gly Gln Tyr Leu Arg Val Gly Lys Ala Val Thr Pro Pro Met Pro Leu Leu Thr Pro Ala Thr Pro Gly Gly Leu Pro Pro Ala Ala Ala Val Ala Ala Ala Ala Ala Thr Ala Lys Ile Thr Ala Gln Glu Ala Val Ala Gly Ala Ala Val Leu Gly Thr Leu Gly Thr Pro Gly Leu Val Ser Pro Ala Leu Thr Leu Ala Gln Pro Leu Gly Thr Leu Pro Gln Ala Val Met Ala Ala Gln Ala Pro Gly Val Ile Thr Gly Val Thr Pro Ala Arg Pro Pro Ile Pro Val Thr Ile Pro Ser Val Gly Val Val Asn Pro Ile Leu Ala Ser Pro Pro Thr Leu Gly Leu Leu Glu Pro Lys Lys Glu Lys Glu Glu Glu Leu Phe Pro Glu Ser Glu Arg Pro Glu Met Leu Ser Glu Gln Glu His Met Ser Ile Ser Gly Ser Ser Ala Arg His Met Val Met Gln Lys Leu Leu Arg Lys Gln Glu Ser

465 470 475 480 Thr Val Met Val Leu Arg Asn Met Val Asp Pro Lys Asp Ile Asp Asp 485 490 Asp Leu Glu Glu Val Thr Glu Glu Cys Gly Lys Phe Gly Ala Val 500 505 Asn Arg Val Ile Ile Tyr Gln Glu Lys Gln Gly Glu Glu Asp Ala 520 Glu Ile Ile Val Lys Ile Phe Val Glu Phe Ser Ile Ala Ser Glu Thr 530 535 His Lys Ala Ile Gln Ala Leu Asn Gly Arg Trp Phe Ala Gly Arg Lys 550 555 Val Val Ala Glu Val Tyr Asp Gln Glu Arg Phe Asp Asn Ser Asp Leu 565 570 Ser Ala <210> 1297 <211> 179 <212> PRT <213> Homo sapiens <400> 1297 Pro Arg Gly Thr Ser Arg Arg Ser Ala Trp Pro Lys Met Ala Ala Ser Val Cys Ser Gly Leu Leu Gly Pro Arg Val Leu Ser Trp Ser Arg Glu 20 25 Leu Pro Cys Ala Trp Arg Ala Leu His Thr Ser Pro Val Cys Ala Lys 40 Asn Arg Ala Ala Arg Val Arg Val Ser Lys Gly Asp Lys Pro Val Thr 50 Tyr Glu Glu Ala His Ala Pro His Tyr Ile Ala His Arg Lys Gly Trp 70 Leu Ser Leu His Thr Gly Asn Leu Asp Gly Glu Asp His Ala Ala Glu 90

Arg Thr Val Glu Asp Val Phe Leu Arg Lys Phe Met Trp Gly Thr Phe 105

100

Pro Gly Cys Leu Ala Asp Gln Leu Val Leu Lys Arg Arg Gly Asn Gln 115 120 125

Leu Glu Ile Cys Ala Val Val Leu Arg Gln Leu Ser Pro His Lys Tyr 130 135 140

Tyr Phe Leu Val Gly Tyr Ser Glu Thr Leu Leu Ser Tyr Phe Tyr Lys 145 150 155 160

Cys Pro Val Arg Leu His Leu Gln Thr Val Pro Ser Lys Val Val Tyr 165 170 175

Lys Tyr Leu

<210> 1298

<211> 155

<212> PRT

<213> Homo sapiens

<400> 1298

Gly Leu Val Thr Ile Phe Gly Cys Pro Ser Arg Glu Lys Gly Arg Met
1 5 10 15

Pro Leu Glu Ser Ser Ser Ser Met Pro Leu Ser Phe Pro Ser Leu Leu 20 25 30

Pro Ser Val Pro His Asn Thr Asn Pro Ser Pro Pro Leu Met Ser Tyr 35 40 45

Ile Thr Ser Gln Glu Met Lys Cys Ile Leu His Trp Phe Ala Asn Trp 50 55 60

Ser Gly Pro Gln Arg Glu Arg Phe Leu Glu Asp Leu Val Ala Lys Ala 65 70 75 80

Val Pro Glu Lys Leu Gln Pro Leu Leu Asp Ser Leu Glu Gln Leu Ser 85 90 95

Val Ser Gly Ala Asp Arg Pro Pro Ser Ile Phe Glu Cys Gln Leu His 100 105 110

Leu Trp Asp Gln Trp Phe Arg Gly Trp Ala Glu Gln Glu Arg Asn Glu
115 120 125

Phe Val Arg Gln Leu Glu Phe Ser Glu Pro Asp Phe Val Ala Lys Phe 130 135 140

Tyr Gln Ala Val Ala Ala Thr Ala Gly Lys Asp 145 150 155

<210> 1299

WO 00/55350

<211> 449

<212> PRT

<213> Homo sapiens

<400> 1299

Ser Asn Arg Lys Phe Ile Pro His Gln Leu Leu Val Ala Ile Asp Leu 1 5 10 15

Leu Ala Arg Gln Ala Val Arg Tyr Ile Asn Glu Asn Leu Ile Val Asn
20 25 30

Thr Asp Glu Leu Gly Arg Asp Cys Leu Ile Asn Ala Ala Lys Thr Ser 35 40 45

Met Ser Ser Lys Ile Ile Gly Ile Asn Gly Asp Phe Phe Ala Asn Met 50 55 60

Val Val Asp Ala Val Leu Ala Ile Lys Tyr Thr Asp Ile Arg Gly Gln 65 70 75 80

Pro Arg Tyr Pro Val Asn Ser Val Asn Ile Leu Lys Ala His Gly Arg
85 90 95

Ser Gln Met Glu Ser Met Leu Ile Ser Gly Tyr Ala Leu Asn Cys Val 100 105 110

Val Gly Ser Gln Gly Met Pro Lys Arg Ile Val Asn Ala Lys Ile Ala 115 120 125

Cys Leu Asp Phe Ser Leu Gln Lys Thr Lys Met Lys Leu Gly Val Gln 130 135 140

Val Val Ile Thr Asp Pro Glu Lys Leu Asp Gln Ile Arg Gln Arg Glu 145 150 155 160

Ser Asp Ile Thr Lys Glu Arg Ile Gln Lys Ile Leu Ala Thr Gly Ala 165 170 175

Asn Val Ile Leu Thr Thr Gly Gly Ile Asp Asp Met Cys Leu Lys Tyr 180 185 190

Phe Val Glu Ala Gly Ala Met Ala Val Arg Arg Val Leu Lys Arg Asp 195 200 205

Leu Lys Arg Ile Ala Lys Ala Ser Gly Ala Thr Ile Leu Ser Thr Leu

	210					215					220				
Ala 225	Asn	Leu	Glu	Gly	Glu 230	Glu	Thr	Phe	Glu	Ala 235	Ala	Met	Leu	Gly	Glr 240
Ala	Glu	Glu	Val	Val 245	Gln	Glu	Arg	Ile	Cys 250	Asp	Asp	Glu	Leu	Ile 255	Leu
Ile	Lys	Asn	Thr 260	Lys	Ala	Arg	Thr	Ser 265	Ala	Ser	Ile	Ile	Leu 270	Arg	Gly
Ala	Asn	Asp 275	Phe	Met	Cys	Asp	Glu 280	Met	Glu	Arg	Ser	Leu 285	His	Asp	Ala
Leu	Cys 290	Val	Val	Lys	Arg	Val 295	Leu	Glu	Ser	Lys	Ser 300	Val	Val	Pro	Gly
Gly 305	Gly	Ala	Val	Glu	Ala 310	Ala	Leu	Ser	Ile	Туг 315	Leu	Glu	Asn	Tyr	Ala 320
Thr	Ser	Met	Gly	Ser 325	Arg	Glu	Gln	Leu	Ala 330	Ile	Ala	Glu	Phe	Ala 335	Arg
Ser	Leu	Leu	Val 340	Ile	Pro	Asn	Thr	Leu 345	Ala	Val	Asn	Ala	Ala 350	Gln	Asp
Ser	Thr	Asp 355	Leu	Val	Ala	Lys	Leu 360	Arg	Ala	Phe	His	Asn 365	Glu	Ala	Gln
Val	Asn 370	Pro	Glu	Arg	Lys	Asn 375	Leu	Lys	Trp	Ile	Gly 380	Leu	Asp	Leu	Ser
Asn 385	Gly	Lys	Pro	Arg	Asp 390	Asn	Lys	Gln	Ala	Gly 395	Val	Phe	Glu	Pro	Thr
Ile	Val	Lys	Val	Lys 405	Ser	Leu	Lys	Phe	Ala 410	Thr	Glu	Ala	Ala	Ile 415	Thr
Ile	Leu	Arg	Ile 420	Asp	Asp	Leu	Ile	Lys 425	Leu	His	Pro	Glu	Ser 430	Lys	Asp
Asp	Lys	His 435	Gly	Ser	Tyr	Glu	Asp 440	Ala	Val	His	Ser	Gly 445	Ala	Leu	Asn

Asp

<210> 1300 <211> 96

1338

<212> PRT

<213> Homo sapiens

<400> 1300

Leu Met Phe Tyr Val Leu Phe Trp Thr Leu Ser Ser Cys Lys Asn Phe 1 5 10 15

Tyr Lys Asn Cys Phe Leu His Pro Cys Gly Ala Tyr Ser Ser Glu Pro 20 25 30

Ser Pro Gln Ser Gln Cys Leu Cys Phe Leu Phe Tyr Phe Cys Ser Ile $35 \hspace{1cm} 40 \hspace{1cm} 45$

Arg Phe Leu Leu Leu Cys Leu Lys Ser Ser Leu Gly Ser Tyr Gln 50 55 60

Gly Phe Ser Phe Cys Val Ala Phe Ala Ala Trp Ile Lys His Trp Leu 65 70 75 80

Thr Val Leu Met Cys Glu Glu Lys Lys Phe Ser Lys Ala Gly Glu Leu 85 90 95

<210> 1301

<211> 332

<212> PRT

<213> Homo sapiens

<400> 1301

Gly Glu Pro Lys Met Thr Gly Ser Asn Glu Phe Lys Leu Asn Gln Pro 1 5 10 15

Pro Glu Asp Gly Ile Ser Ser Val Lys Phe Ser Pro Asn Thr Ser Gln
20 25 30

Phe Leu Leu Val Ser Ser Trp Asp Thr Ser Val Arg Leu Tyr Asp Val 35 40 45

Pro Ala Asn Ser Met Arg Leu Lys Tyr Gln His Thr Gly Ala Val Leu 50 60

Asp Cys Ala Phe Tyr Asp Pro Thr His Ala Trp Ser Gly Gly Leu Asp
65 70 75 80

His Gln Leu Lys Met His Asp Leu Asn Thr Asp Gln Glu Asn Leu Val 85 90 95

1339

Gly Thr His Asp Ala Pro Ile Arg Cys Val Glu Tyr Cys Pro Glu Val 100 105 Asn Val Met Val Thr Gly Ser Trp Asp Gln Thr Val Lys Leu Trp Asp Pro Arg Thr Pro Cys Asn Ala Gly Thr Phe Ser Gln Pro Glu Lys Val 135 Tyr Thr Leu Ser Val Ser Gly Asp Arg Leu Ile Val Gly Thr Ala Gly 145 150 155 Arg Arg Val Leu Val Trp Asp Leu Arg Asn Met Gly Tyr Val Gln Gln 170 Arg Arg Glu Ser Ser Leu Lys Tyr Gln Thr Arg Cys Ile Arg Ala Phe 180 185 190 Pro Asn Lys Gln Gly Tyr Val Leu Ser Ser Ile Glu Gly Arg Val Ala 195 200 Val Glu Tyr Leu Asp Pro Ser Pro Glu Val Gln Lys Lys Lys Tyr Ala 215 Phe Lys Cys His Arg Leu Lys Glu Asn Asn Ile Glu Gln Ile Tyr Pro 230 235 Val Asn Ala Ile Ser Phe His Asn Ile His Asn Thr Phe Ala Thr Gly 245 Gly Ser Asp Gly Phe Val Asn Ile Trp Asp Pro Phe Asn Lys Lys Arg 265 Leu Cys Gln Phe His Arg Tyr Pro Thr Ser Ile Ala Ser Leu Ala Phe 275 280 Ser Asn Asp Gly Thr Thr Leu Ala Ile Ala Ser Ser Tyr Met Tyr Glu 290 295 Met Asp Asp Thr Glu His Pro Glu Asp Gly Ile Phe Ile Arg Gln Val 315

Thr Asp Ala Glu Thr Lys Pro Lys Ser Pro Cys Thr

325

<210> 1302

<211> 565

<212> PRT

<213> Homo sapiens

<400)> 13	302													
Leu 1	His	Cys	Thr	Met 5	Cys	Gly	Ile	Trp	Ala 10	Leu	Phe	Gly	Ser	Asp 15	As
Cys	Leu	Ser	Val 20	Gln	Cys	Leu	Ser	Ala 25	Met	Lys	Ile	Ala	His 30	Arg	Gl
Pro	Asp	Ala 35	Phe	Arg	Phe	Glu	Asn 40	Val	Asn	Gly	Tyr	Thr 45	Asn	Cys	Су
Phe	Gly 50	Phe	His	Arg	Leu	Ala 55	Val	Val	Asp	Pro	Leu 60	Phe	Gly	Met	G1
Pro 65	Ile	Arg	Val	Lys	Lys 70	Tyr	Pro	Tyr	Leu	Trp 75	Leu	Cys	Tyr	Asn	G1 ₃
Glu	Ile	Tyr	Asn	His 85	Lys	Lys	Met	Gln	Gln 90	His	Phe	Glu	Phe	Glu 95	ту
Gln	Thr	Lys	Val 100	Asp	Gly	Glu	Ile	Ile 105	Leu	His	Leu	Tyr	Asp 110	Lys	Gl
Gly	Ile	Glu 115	Gln	Thr	Ile	Cys	Met 120	Leu	Asp	Gly	Val	Phe 125	Ala	Phe	Va.
Leu	Leu 130	Asp	Thr	Ala	Asn	Lys 135	Lys	Val	Phe	Leu	Gly 140	Arg	Asp	Thr	ту
Gly 145	Val	Arg	Pro	Leu	Phe 150	Lys	Ala	Met	Thr	Glu 155	Asp	Gly	Phe	Leu	Ala 16
Val	Cys	Ser	Glu	Ala 165	Lys	Gly	Leu	Val	Thr 170	Leu	Lys	His	Ser	Ala 175	Th
Pro	Phe	Leu	Lys 180	Val	Glu	Pro	Phe	Leu 185	Pro	Gly	His	туr	Glu 190	Val	Le
Asp	Leu	Lys 195	Pro	Asn	Gly	Lys	Val 200	Ala	ser	Val	Glu	Met 205	Val	Lys	ту
His	His 210	Cys	Arg	Asp	Glu	Pro 215	Leu	His	Ala	Leu	Tyr 220	Asp	Asn	Val	Gl
Lys 225	Leu	Phe	Pro	Gly	Phe 230	Glu	Ile	Glu	Thr	Val 235	Lys	Asn	Asn	Leu	Arc 240
Ile	Leu	Phe	Asn	Asn 245	Ala	Val	Lys	Lys	Arg 250	Leu	Met	Thr	Asp	Arg 255	Ar
Ile	Gly	Cys	Leu	Leu	Ser	Gly	Gly	Leu	Asp	Ser	Ser	Leu	Val	Ala	Ala

270 260 265 Thr Leu Leu Lys Gln Leu Lys Glu Ala Gln Val Gln Tyr Pro Leu Gln 275 Thr Phe Ala Ile Gly Met Glu Asp Ser Pro Asp Leu Leu Ala Ala Arg 295 Lys Val Ala Asp His Ile Gly Ser Glu His Tyr Glu Val Leu Phe Asn 315 310 Ser Glu Glu Gly Ile Gln Ala Leu Asp Glu Val Ile Phe Ser Leu Glu 325 330 Thr Tyr Asp Ile Thr Thr Val Arg Ala Ser Val Gly Met Tyr Leu Ile 345 Ser Lys Tyr Ile Arg Lys Asn Thr Asp Ser Val Val Ile Phe Ser Gly 355 360 Glu Gly Ser Asp Glu Leu Thr Gln Gly Tyr Ile Tyr Phe His Lys Ala 370 375 Pro Ser Pro Glu Lys Ala Glu Glu Glu Ser Glu Arg Leu Leu Arg Glu 395 Leu Tyr Leu Phe Asp Val Leu Arg Ala Asp Arg Thr Thr Ala Ala His Gly Leu Glu Leu Arg Val Pro Phe Leu Asp His Arg Phe Ser Ser Tyr 425 420 Tyr Leu Ser Leu Pro Pro Glu Met Arg Ile Pro Lys Asn Gly Ile Glu 440 Lys His Leu Leu Arg Glu Thr Phe Glu Asp Ser Asn Leu Ile Pro Lys 450 455 Glu Ile Leu Trp Arg Pro Lys Glu Ala Phe Ser Asp Gly Ile Thr Ser 470 465 Val Lys Asn Ser Trp Phe Lys Ile Leu Gln Glu Tyr Val Glu His Gln 490 Val Asp Asp Ala Met Met Ala Asn Ala Ala Gln Lys Phe Pro Phe Asn 500 505 Thr Pro Lys Thr Lys Glu Gly Tyr Tyr Tyr Arg Gln Val Phe Glu Arg 515 520 -His Tyr Pro Gly Arg Ala Asp Trp Leu Ser His Tyr Trp Met Pro Lys

1342

530 535 540

Trp Ile Asn Ala Thr Asp Pro Ser Ala Arg Thr Leu Thr His Tyr Lys 545 550 555 560

Ser Ala Val Lys Ala 565

<210> 1303

<211> 441

<212> PRT

<213> Homo sapiens

<400> 1303

Arg Arg Arg Ala Cys Arg Ser Ala Glu Gly Thr Gly Leu Arg Ser 1 5 10 15

Leu Leu Pro Pro Arg Leu Gln Leu Pro Ala Gly Pro Phe Ser Arg
20 25 30

Cys Arg Trp Asp Pro Val Ser Ser Pro Arg Pro Ser Thr Met Pro Pro 35 40 45

Lys Lys Gly Gly Asp Gly Ile Lys Pro Pro Pro Ile Ile Gly Arg Phe 50 55 60

Gly Thr Ser Leu Lys Ile Gly Ile Val Gly Leu Pro Asn Val Gly Lys
65 70 75 80

Ser Thr Phe Phe Asn Val Leu Thr Asn Ser Gln Ala Ser Ala Glu Asn 85 90 95

Phe Pro Phe Cys Thr Ile Asp Pro Asn Glu Ser Arg Val Pro Val Pro 100 105 110

Asp Glu Arg Phe Asp Phe Leu Cys Gln Tyr His Lys Pro Ala Ser Lys 115 120 125

Ile Pro Ala Phe Leu Asn Val Val Asp Ile Ala Gly Leu Val Lys Gly 130 135 140

Ala His Asn Gly Gln Gly Leu Gly Asn Ala Phe Leu Ser His Ile Ser 145 150 155 160

Ala Cys Asp Gly Ile Phe His Leu Thr Arg Ala Phe Glu Asp Asp Asp 165 170 175

Ile Thr His Val Glu Gly Ser Val Asp Pro Ile Arg Asp Ile Glu Ile 180 185 190

Ile	His	Glu 195	Glu	Leu	Gln	Leu	Lys 200	Asp	Glu	Glu	Met	11e 205	Gly	Pro	Il€
Ile	Asp 210	Lys	Leu	Glu	Lys	Val 215	Ala	Val	Arg	Gly	Gly 220	Asp	Lys	Lys	Leu
Lys 225	Pro	Glu	Tyr	Asp	Ile 230	Met	Cys	Lys	Val	Lys 235	Ser	Trp	Val	Ile	Asp 240
Gln	Lys	Lys	Pro	Val 245	Arg	Phe	Tyr	His	Asp 250	Trp	Asn	Asp	Lys	Glu 255	Ile
Glu	Val	Leu	Asn 260	Lys	His	Leu	Phe	Leu 265	Thr	Ser	Lys	Pro	Met 270	Val	Туг
Leu	Val	Asn 275	Leu	Ser	Glu	Lys	Asp 280	Tyr	Ile	Arg	Lys	Lys 285	Asn	Lys	Trp
Leu	Ile 290	Lys	Ile	Lys	Glu	Trp 295	Val	Asp	Lys	Tyr	Asp 300	Pro	Gly	Ala	Leu
Val 305	Ile	Pro	Phe	Ser	Gly 310	Ala	Leu	Glu	Leu	Lys 315	Leu	Gln	Glu	Leu	Ser 320
Ala	Glu	Glu	Arg	Gln 325	Lys	Tyr	Leu	Glu	Ala 330	Asn	Met	Thr	Gln	Ser 335	Ala
Leu	Pro	Lys	Ile 340	Ile	Lys	Ala	Gly	Phe 345	Ala	Ala	Leu	Gln	Leu 350	Glu	Tyr
Phe	Phe	Thr 355	Ala	Gly	Pro	Asp	Glu 360	Val	Arg	Ala	Trp	Thr 365	Ile	Arg	Lys
Gly	Thr 370	Lys	Ala	Pro	Gln	Ala 375	Ala	Gly	Lys	Ile	His 380	Thr	Asp	Phe	Glu
Lys 385	Gly	Phe	Ile	Met	Ala 390	Glu	Val	Met	Lys	Туг 395	Glu	Asp	Phe	Lys	Glu 400
Glu	Gly	Ser	Glu	Asn 405	Ala	Val	Lys	Ala	Ala 410	Gly	Lys	Tyr	Arg	Gln 415	Gln
Gly	Arg	Asn	Tyr 420	Ile	Val	Glu	Asp	Gly 425	Asp	Ile	Ile	Phe	Phe 430	Lys	Phe
Asn	Thr	Pro	Gln	Gln	Pro	Lys	Lys	Lys							

<210> 1304

<211> 94

<212> PRT

<213> Homo sapiens

<400> 1304

Glu Lys Lys Arg Gly Arg Glu Asp Lys Pro Gly Thr Met Ala Thr Phe 1 5 10 15

Pro Pro Ala Thr Ser Ala Pro Gln Gln Pro Pro Gly Pro Glu Asp Glu 20 25 30

Asp Ser Ser Leu Asp Glu Ser Asp Leu Tyr Ser Leu Ala His Ser Tyr 35 40 45

Leu Gly Gly Gly Arg Lys Gly Arg Thr Lys Arg Glu Ala Ala 50 55 60

Asn Thr Asn Arg Pro Ser Pro Gly Gly His Glu Arg Lys Leu Val Thr 65 70 75 80

Lys Leu Gln Asn Ser Glu Arg Lys Lys Arg Gly Ala Arg Arg 85 90

<210> 1305

<211> 82

<212> PRT

<213> Homo sapiens

<400> 1305

Val Ile Leu Glu Met Val Ile Val Phe Cys Leu Val Thr Phe Ala Thr 1 5 10 15

Val Pro Phe Lys Thr Met Trp Lys Pro Gln Val Cys Gly Gln His Arg
20 25 30

Trp Asn Asp Ile Leu Cys Phe Leu Arg Leu Pro Ser Thr Arg His Ile 35 40 45

Ser Leu Val Leu Gln Met Ser Ala Gln Val Leu Val Thr Ser Phe Ser 50 55 60

Cys Cys Pro Gly Lys Ser Val Cys Ala Gly Ala Gly Ala Leu Ala Leu 65 70 75 80

Phe Arg

1345

<210> 1306 <211> 231 <212> PRT <213> Homo sapiens <400> 1306 Ala Arg Glu Met Ala Ala Gln Gln Arg Asp Cys Gly Gly Ala Ala Gln 10 Leu Ala Gly Pro Ala Ala Glu Ala Asp Pro Leu Gly Arg Phe Thr Cys Pro Val Cys Leu Glu Val Tyr Glu Lys Pro Val Gln Val Pro Cys Gly 35 His Val Phe Cys Ser Ala Cys Leu Gln Glu Cys Leu Lys Pro Lys Lys Pro Val Cys Gly Val Cys Arg Ser Ala Leu Ala Pro Gly Val Arg Ala 70 Val Glu Leu Glu Arg Gln Ile Glu Ser Thr Glu Thr Ser Cys His Gly 85 Cys Arg Lys Asn Phe Phe Leu Ser Lys Ile Arg Ser His Val Ala Thr 105 Cys Ser Lys Tyr Gln Asn Tyr Ile Met Glu Gly Val Lys Ala Thr Ile 120 Lys Asp Ala Ser Leu Gln Pro Arg Asn Val Pro Asn Arg Tyr Thr Phe 130 135 Pro Cys Pro Tyr Cys Pro Glu Lys Asn Phe Asp Gln Glu Gly Leu Val 150 155 Glu His Cys Lys Leu Phe His Ser Thr Asp Thr Lys Ser Val Val Cys 170 Pro Ile Cys Ala Ser Met Pro Trp Gly Asp Pro Asn Tyr Arg Ser Ala 180 Asn Phe Arg Glu His Ile Gln Arg Arg His Arg Phe Ser Tyr Asp Thr 200 195 Phe Val Asp Tyr Asp Val Asp Glu Glu Asp Met Met Asn Gln Val Leu 215 220 Gln Arg Ser Ile Ile Asp Gln

230

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<210> 1307
<211> 170
<212> PRT
<213> Homo sapiens
<400> 1307
Gln Lys Gln Arg Thr Phe Trp Lys Tyr Tyr Tyr Asp Gly Lys Asp Tyr
                                     10
Ile Glu Phe Asn Lys Glu Ile Pro Ala Trp Val Pro Phe Asp Pro Ala
Ala Gln Ile Thr Lys Gln Lys Trp Glu Ala Glu Pro Val Tyr Val Gln
                             40
Arg Ala Lys Ala Tyr Leu Glu Glu Glu Cys Pro Ala Thr Leu Arg Lys
                         55
Tyr Leu Lys Tyr Ser Lys Asn Ile Leu Asp Arg Gln Asp Pro Pro Ser
                    70
                                         75
Val Val Val Thr Ser His Gln Ala Pro Gly Glu Lys Lys Lys Leu Lys
                 85
                                     90
Cys Leu Ala Tyr Asp Phe Tyr Pro Gly Lys Ile Asp Val His Trp Thr
           100
                                105
Arg Ala Gly Glu Val Gln Glu Pro Glu Leu Arg Gly Asp Val Leu His
                            120
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Asn Gly Asn Gly Thr Tyr Gln Ser Trp Val Val Val Ala Val Pro Pro

Gln Asp Thr Ala Pro Tyr Ser Cys His Val Gln His Ser Ser Leu Ala

155

135

Gln Pro Leu Val Val Pro Trp Glu Ala Ser 165 170

150

<210> 1308

130

145

<211> 111

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

1347

<222> (95) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (104) <223> Xaa equals any of the naturally occurring L-amino acids Cys Ser Cys Thr Val Arg Ala Arg Arg Arg Leu Asn Arg Gly Leu Arg 10 Arg Lys Gln His Ser Leu Leu Lys Arg Leu Arg Lys Ala Lys Lys Glu Ala Pro Pro Met Glu Lys Pro Glu Val Val Lys Thr His Leu Arg Asp 40 Met Ile Ile Leu Pro Glu Met Val Gly Ser Met Val Gly Val Tyr Asn Gly Lys Thr Phe Asn Gln Val Glu Ile Lys Pro Glu Met Ile Gly His 70 Tyr Leu Gly Glu Phe Ser Ile Thr Tyr Lys Pro Val Lys His Xaa Arg 90 Pro Gly Ile Gly Ala Thr His Xaa Ser Arg Phe Ile Pro Leu Lys 100 <210> 1309 <211> 121 <212> PRT <213> Homo sapiens

<400> 1309

Pro Val Ser Pro Gln Glu Arg Pro Pro Tyr Leu Ala Val Pro Gly 5 10

His Gly Glu Glu Tyr Pro Val Ala Gly Ala His Ser Ser Pro Pro Lys 25

Ala Arg Phe Leu Arg Val Pro Ser Glu His Pro Tyr Leu Thr Pro Ser

Pro Glu Ser Pro Glu His Trp Ala Ser Pro Ser Pro Pro Ser Leu Ser 55 50

Asp Trp Ser Glu Ser Thr Pro Ser Pro Ala Thr Ala Thr Gly Ala Met

1348

70 80 65 75 Ala Thr Thr Gly Ala Leu Pro Ala Gln Pro Leu Pro Leu Ser Val 85 90 Pro Ser Ser Leu Ala Gln Ala Gln Thr Gln Leu Gly Pro Gln Pro Glu 100 105 Val Thr Pro Lys Arg Gln Val Leu Ala 115 <210> 1310 <211> 206 <212> PRT <213> Homo sapiens <400> 1310 Gln Cys Pro Gly Arg Ala Gly Ala Pro Gln Thr Arg Ala Pro Arg Ala Arg Glu Arg Gly Gly Ala Met Ala Thr Ala Asn Gly Ala Val Glu Asn 20 Gly Gln Pro Asp Arg Lys Pro Pro Ala Leu Pro Arg Pro Ile Arg Asn 40 Leu Glu Val Lys Phe Thr Lys Ile Phe Ile Asn Asn Glu Trp His Glu 55 Ser Lys Ser Gly Lys Lys Phe Ala Thr Cys Asn Pro Ser Thr Arg Glu 65 70 Gln Ile Cys Glu Val Glu Glu Gly Asp Lys Pro Asp Val Asp Lys Ala 90 Val Glu Ala Ala Gln Val Ala Phe Gln Arg Gly Ser Pro Trp Arg Arg 105 Leu Asp Ala Leu Ser Arg Gly Arg Leu Leu His Gln Leu Ala Asp Leu 115 120 Val Glu Arg Asp Arg Ala Thr Leu Ala Ala Leu Glu Thr Met Asp Thr 135 140 Gly Lys Pro Phe Leu His Ala Phe Phe Ile Asp Leu Glu Gly Cys Ile 150 155 Arg Thr Leu Arg Tyr Phe Ala Gly Trp Ala Asp Lys Ile Gln Gly Lys

170

175

1349

Thr Ile Pro Thr Asp Asp Asn Val Cys Ala Ser Pro Gly Met Ser Pro 180 185 190

Leu Val Ser Val Gly Pro Ser Leu His Gly Thr Ser Pro Cys 195 200 205

<210> 1311

<211> 142

<212> PRT

<213> Homo sapiens

<400> 1311

Ser Trp Glu Thr Glu Lys Met Gln Thr Ala Gly Ala Leu Phe Ile Ser 1 5 10 15

Pro Ala Leu Ile Arg Cys Cys Thr Arg Gly Leu Ile Arg Pro Val Ser 20 25 30

Ala Ser Phe Leu Asn Ser Pro Val Asn Ser Ser Lys Gln Pro Ser Tyr 35 40 45

Ser Asn Phe Pro Leu Gln Val Ala Arg Arg Glu Phe Gln Thr Ser Val
50 55 60

Val Ser Arg Asp Ile Asp Thr Ala Ala Lys Phe Ile Gly Ala Gly Ala 65 70 75 80

Ala Thr Val Gly Val Ala Gly Ser Gly Ala Gly Ile Gly Thr Val Phe 85 90 95

Gly Ser Leu Ile Ile Gly Tyr Ala Arg Asn Pro Ser Leu Lys Gln Gln
100 105 110

Leu Phe Ser Tyr Ala Ile Leu Gly Phe Ala Leu Ser Glu Ala Met Gly
115 120 125

Leu Phe Cys Leu Met Val Ala Phe Leu Ile Leu Phe Ala Met 130 135 140

<210> 1312

<211> 495

<212> PRT

<213> Homo sapiens

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1350

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		195					200					205			
Leu	Cys 210	Thr	Pro	Val	Gly	Leu 215	Ser	Arg	Met	Phe	Thr 220	Val	Met	Gly	Glr
Leu 225	Leu	Val	Lys	Pro	Thr 230	Ile	Leu	Glu	Asp	Leu 235	Asp	Glu	Gln	Ile	Туг 240
Ile	Ile	Thr	Leu	Glu 245	Glu	Glu	Ala	Leu	Gln 250	Arg	Arg	Leu	Asn	Gly 255	Leu
Ser	Ser	Ser	Val 260	Glu	Tyr	Asn	Ile	Met 265	Glu	Leu	Glu	Gln	Glu 270	Leu	Glu
Asn	Val	Lys 275	Thr	Leu	Lys	Thr	Lys 280	Leu	Asp	Pro	Trp	Ser 285	Ser	Phe	Ser
Val	Leu 290	Gln	Ser	Pro	Val	Trp 295	His	Phe	Ala	Ala	Gln 300	Thr	Pro	Ala	Asp
Ile 305	Val	Ser	Pro	Asp	Ser 310	His	Phe	Met	Leu	Ser 315	Thr	Gln	Gly	Met	Ser 320
Trp	Ala	Gln	Leu	Val 325	Phe	Leu	Leu	Pro	Ala 330	Ser	Arg	Pro	Gly	Asn 335	Ser
Gln	Asp	Lys	Arg 340	Arg	Lys	Lys	Ala	Ser 345	Ala	Trp	Glu	Arg	Asn 350	Leu	Val
Tyr	Pro	Ala 355	Val	Met	Val	Leu	Leu 360	Leu	Ile	Glu	Thr	Ser 365	Ile	Ser	Val
Leu	Leu 370	Val	Ala	Cys	Asn	Ile 375	Leu	Суз	Leu	Leu	Val 380	Asp	Glu	Thr	Ala
Met 385	Pro	Lys	Gly	Thr	Arg 390	Gly	Xaa	Gly	Ile	Gly 395	Asn	Ala	Ser	Leu	Ser 400
Thr	Phe	Gly	Phe	Val 405	Gly	Ala	Ala	Leu	Glu 410	Ile	Ile	Leu	Ile	Phe 415	Tyr
Leu	Met	Val	Ser 420	Ser	Val	Val	Gly	Phe 425	Tyr	Ser	Leu	Arg	Phe 430	Phe	Gly
Asn	Phe	Thr 435	Pro	Lys	Lys	Asp	Asp 440	Thr	Thr	Met	Thr	Lys 445	Ile	Ile	Gly
Asn	Cys 450	Val	Ser	Ile	Leu	Val 455	Leu	Ser	Ser	Ala	Xaa 460	Pro	Val	Met	Ser
Arg	Thr	Leu	Gly	Leu	His	Lys	Leu	His	Leu	Pro	Asn	Thr	Ser	Arg	Asp

1352

465 470 475 480

Ser Glu Thr Ala Lys Pro Ser Val Asn Gly His Gln Lys Ala Leu 485 490 495

<210> 1313

<211> 790

<212> PRT

<213> Homo sapiens

<400> 1313

Gly Thr Arg Gly Thr Ala Thr Glu Arg Leu Lys Met Ile Pro Phe Leu 1 5 10 15

Pro Met Phe Ser Leu Leu Leu Leu Leu Ile Val Asn Pro Ile Asn Ala 20 25 30

Asn Asn His Tyr Asp Lys Ile Leu Ala His Ser Arg Ile Arg Gly Arg
35 40 45

Asp Gln Gly Pro Asn Val Cys Ala Leu Gln Gln Ile Leu Gly Thr Lys
50 55 60

Lys Lys Tyr Phe Ser Thr Cys Lys Asn Trp Tyr Lys Lys Ser Ile Cys 65 70 75 80

Gly Gln Lys Thr Thr Val Leu Tyr Glu Cys Cys Pro Gly Tyr Met Arg
85 90 95

Met Glu Gly Met Lys Gly Cys Pro Ala Val Leu Pro Ile Asp His Val

Tyr Gly Thr Leu Gly Ile Val Gly Ala Thr Thr Thr Gln Arg Tyr Ser 115 120 125

Asp Ala Ser Lys Leu Arg Glu Glu Ile Glu Gly Lys Gly Ser Phe Thr 130 135 140

Tyr Phe Ala Pro Ser Asn Glu Ala Trp Asp Asn Leu Asp Ser Asp Ile 145 150 155 160

Arg Arg Gly Leu Glu Ser Asn Val Asn Val Glu Leu Leu Asn Ala Leu 165 170 175

His Ser His Met Ile Asn Lys Arg Met Leu Thr Lys Asp Leu Lys Asn 180 185 190

Gly Met Ile Ile Pro Ser Met Tyr Asn Asn Leu Gly Leu Phe Ile Asn 195 200 205 **WO** 00/55350

His Tyr Pro Asn Gly Val Val Thr Val Asn Cys Ala Arg Ile Ile His

	210					215					220				
Gly 225	Asn	Gln	Ile	Ala	Thr 230	Asn	Gly	Val	Val	His 235	Val	Ile	Asp	Arg	Val 240
Leu	Thr	Gln	Ile	Gly 245	Thr	Ser	Ile	Gln	Asp 250	Phe	Ile	Glu	Ala	Glu 255	Asp
Asp	Leu	Ser	Ser 260	Phe	Arg	Ala	Ala	Ala 265	Ile	Thr	Ser	Asp	Ile 270	Leu	Glu
Ala	Leu	Gly 275	Arg	Asp	Gly	His	Phe 280	Thr	Leu	Phe	Ala	Pro 285	Thr	Asn	Glu
Ala	Phe 290	Glu	Lys	Leu	Pro	Arg 295	Gly	Val	Leu	Glu	Arg 300	Ile	Met	Gly	Asp
Lys 305	Val	Ala	Ser	Glu	Ala 310	Leu	Met	Lys	Tyr	His 315	Ile	Leu	Asn	Thr	Leu 320
Gln	Cys	Ser	Glu	Ser 325	Ile	Met	Gly	Gly	Ala 330	Val	Phe	Glu	Thr	Leu 335	Glu
Gly	Asn	Thr	Ile 340	Glu	Ile	Gly	Cys	Asp 345	Gly	Asp	Ser	Ile	Thr 350	Val	Asn
Gly	Ile	Lys 355	Met	Val	Asn	Lys	Lys 360	Asp	Ile	Val	Thr	Asn 365	Asn	Gly	Val
Ile	His 370	Leu	Ile	Asp	Gln	Val 375	Leu	Ile	Pro	Asp	Ser 380	Ala	Lys	Gln	Val
Ile 385	Glu	Leu	Ala	Gly	Lys 390	Gln	Gln	Thr	Thr	Phe 395	Thr	Asp	Leu	Val	Ala 400
Gln	Leu	Gly	Leu	Ala 405	Ser	Ala	Leu	Arg	Pro 410	Asp	Gly	Glu	Tyr	Thr 415	Leu
Leu	Ala	Pro	Val 420	Asn	Asn	Ala	Phe	Ser 425	Asp	Asp	Thr	Leu	Ser 430	Met	Asp
Gln	Arg	Leu 435	Leu	Lys	Leu	Ile	Leu 440	Gln	Asn	His	Ile	Leu 445	Lys	Val	Lys
Val	Gly 450	Leu	Asn	Glu	Leu	Туг 455	Asn	Gly	Gln	Ile	Leu 460	Glu	Thr	Ile	Gly
Gly 465	Lys	Gln	Leu	Arg	Val 470	Phe	Val	Tyr	Arg	Thr 475	Ala	Val	Cys	Ile	Glu 480

Asn	Ser	Cys	Met	Glu 485	Lys	Gly	Ser	Lys	Gln 490	Gly	Arg	Asn	Gly	Ala 495	Ile
His	Ile	Phe	Arg 500	Glu	Ile	Ile	Lys	Pro 505	Ala	Glu	Lys	Ser	Leu 510	His	Glu
Lys	Leu	Lys 515	Gln	Asp	Lys	Arg	Phe 520	Ser	Thr	Phe	Leu	Ser 525	Leu	Leu	Glu
Ala	Ala 530	Asp	Leu	Lys	Glu	Leu 535	Leu	Thr	Gln	Pro	Gly 540	Asp	Trp	Thr	Leu
Phe 545	Val	Pro	Thr	Asn	Asp 550	Ala	Phe	Lys	Gly	Met 555	Thr	Ser	Glu	Glu	Lys 560
Glu	Ile	Leu	Ile	Arg 565	Asp	Lys	Asn	Ala	Leu 570	Gln	Asn	Ile	Ile	Leu 575	туr
His	Leu	Thr	Pro 580	Gly	Val	Phe	Ile	Gly 585	Lys	Gly	Phe	Glu	Pro 590	Gly	Val
Thr	Asn	Ile 595	Leu	Lys	Thr	Thr	Gln 600	Gly	Ser	Lys	Ile	Phe 605	Leu	Lys	Glu
Val	Asn 610	Asp	Thr	Leu	Leu	Val 615	Asn	Glu	Leu	Lys	Ser 620	Lys	Glu	Ser	Asp
Ile 625	Met	Thr	Thr	Asn	Gly 630	Val	Ile	His	Val	Val 635	Asp	Lys	Leu	Leu	Tyr 640
Pro	Ala	Asp	Thr	Pro 645	Val	Gly	Asn	Asp	Gln 650	Leu	Leu	Glu	Ile	Leu 655	Asn
Lys	Leu	Ile	Lys 660	Tyr	Ile	Gln	Ile	Lys 665	Phe	Val	Arg	Gly	Ser 670	Thr	Phe
Lys	Glu	Ile 675	Pro	Val	Thr	Val	Туг 680	Lys	Pro	Ile	Ile	Lys 685	Lys	Tyr	Thr
Lys	Ile 690	Ile	Asp	Gly	Val	Pro 695	Val	Glu	Ile	Thr	Glu 700	Lys	Glu	Thr	Arg
Glu 705	Glu	Arg	Ile	Ile	Thr 710	Gly	Pro	Glu	Ile	Lys 715	Tyr	Thr	Arg	Ile	Ser 720
Thr	Gly	Gly	Gly	Glu 725	Thr	Glu	Glu	Thr	Leu 730	Lys	Lys	Leu	Leu	Gln 735	Glu
Glu	Val	Thr	Lys 740	Val	Thr	Lys	Phe	Ile 745	Glu	Gly	Gly	Asp	Gly 750	His	Leu

1355

Phe Glu Asp Glu Glu Ile Lys Arg Leu Leu Gln Gly Asp Thr Pro Val 755 760 765

Arg Lys Leu Gln Ala Asn Lys Lys Val Gln Gly Ser Arg Arg Leu 770 780

Arg Glu Gly Arg Ser Gln 785 790

<210> 1314

<211> 73

<212> PRT

<213> Homo sapiens

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<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1314

Thr Ser Trp Ala Phe Asp Glu Thr Gly Xaa Asn Thr Ala Val Phe Leu $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Leu Glu Ile Xaa Trp Gly Ile Phe Phe Glu Leu Met Gly Thr Ile Arg
20 25 30

His Asn Cys Leu His Lys Leu Gly Ile Xaa Asp Phe Gly Ile Thr Ile 35 40 45

Tyr Gln Asn Gly Asp Ile Ser Pro Leu Val Leu Arg Cys Lys Pro Lys 50 55 60

Asn Ile Met Thr Ser Phe Gln Ala Ser 65 70

<211> 268 <212> PRT <213> Homo sapiens <400> 1315 Pro Gly Arg Pro Th

Pro Gly Arg Pro Thr Arg Pro Arg Thr Arg Gly Ile Asn Lys Leu Ile 1 5 10 15

Arg Ile Gly Arg Asn Glu Cys Val Val Val Ile Arg Val Asp Lys Glu 20 25 30

Lys Gly Tyr Ile Asp Leu Ser Lys Arg Arg Val Ser Pro Glu Glu Ala 35 40 45

Ile Lys Cys Glu Asp Lys Phe Thr Lys Ser Lys Thr Val Tyr Ser Ile 50 55 60

Leu Arg His Val Ala Glu Val Leu Glu Tyr Thr Lys Asp Glu Gln Leu 65 70 75 80

Glu Ser Leu Phe Gln Arg Thr Ala Trp Val Phe Asp Asp Lys Tyr Lys 85 90 95

Arg Pro Gly Tyr Gly Ala Tyr Asp Ala Phe Lys His Ala Val Ser Asp 100 105 110

Pro Ser Ile Leu Asp Ser Leu Asp Leu Asn Glu Asp Glu Arg Glu Val

Leu Ile Asn Asn Ile Asn Arg Arg Leu Thr Pro Gln Ala Val Lys Ile 130 135 140

Val Lys Glu Ala Leu Arg Ala Gly Leu Asn Cys Ser Thr Glu Asn Met 165 170 175

Pro Ile Lys Ile Asn Leu Ile Ala Pro Pro Arg Tyr Val Met Thr Thr 180 185 190

Thr Thr Leu Glu Arg Thr Glu Gly Leu Ser Val Leu Ser Gln Ala Met 195 200 205

Ala Val Ile Lys Glu Lys Ile Glu Glu Lys Arg Gly Val Phe Asn Val 210 215 220

Gln Met Glu Pro Lys Val Val Thr Asp Thr Asp Glu Thr Glu Leu Ala 225 230 235 240

Arg Gln Met Glu Arg Leu Glu Arg Glu Asn Ala Glu Val Asp Gly Asp

1357

245 250 255

Asp Asp Ala Glu Glu Met Glu Ala Lys Ala Glu Asp 260 265

<210> 1316

<211> 315

<212> PRT

<213> Homo sapiens

<400> 1316

Gly Gln Arg Ala Gly Met Pro His Ala Gln Gly Gly Trp Ser Gly Pro 1 5 10 15

Ala Ala Asp Ser Ala Glu Pro Ala Leu Pro Ala Gly Glu Pro Gly Gly
20 25 30

Pro Thr Leu Met Arg Leu Asn Ser Val Gln Ser Ser Glu Arg Pro Leu 35 40 45

Phe Leu Val His Pro Ile Glu Gly Ser Thr Thr Val Phe His Ser Leu 50 55 60

Ala Ser Arg Leu Ser Ile Pro Thr Tyr Gly Leu Gln Cys Thr Arg Ala 65 70 75 80

Ala Pro Leu Asp Ser Ile His Ser Leu Ala Ala Tyr Tyr Ile Asp Cys 85 90 95

Ile Arg Gln Val Gln Pro Glu Gly Pro Tyr Arg Val Ala Gly Tyr Ser 100 105 110

Tyr Gly Ala Cys Val Ala Phe Glu Met Cys Ser Gln Leu Gln Ala Gln
115 120 125

Gln Ser Pro Ala Pro Thr His Asn Ser Leu Phe Leu Phe Asp Gly Ser 130 135 140

Pro Thr Tyr Val Leu Ala Tyr Thr Gln Ser Tyr Arg Ala Lys Leu Thr 145 150 155 160

Pro Gly Cys Glu Ala Glu Ala Glu Thr Glu Ala Ile Cys Phe Phe Val

Gln Gln Phe Thr Asp Met Glu His Asn Arg Val Leu Glu Ala Leu Leu 180 185 190

Pro Leu Lys Gly Leu Glu Glu Arg Val Ala Ala Ala Val Asp Leu Ile 195 200 205

1358

Ile Lys Ser His Gln Gly Leu Asp Arg Gln Glu Leu Ser Phe Ala Ala

```
210
                       215
Arg Ser Phe Tyr Tyr Lys Leu Arg Ala Ala Glu Gln Tyr Thr Pro Lys
225
                    230
                                        235
Ala Lys Tyr His Gly Asn Val Met Leu Leu Arg Ala Lys Thr Gly Gly
                245
                                     250
Ala Tyr Gly Glu Asp Leu Gly Ala Asp Tyr Asn Leu Ser Gln Val Cys
                                265
Asp Gly Lys Val Ser Val His Val Ile Glu Gly Asp His Arg Thr Leu
        275
                            280
Leu Glu Gly Ser Gly Leu Glu Ser Ile Ile Ser Ile Ile His Ser Ser
                        295
                                             300
Leu Ala Glu Pro Arg Val Ser Val Arg Glu Gly
                    310
<210> 1317
<211> 191
<212> PRT
<213> Homo sapiens
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<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (10)
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<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
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<222> (25) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (186) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1317 Thr Thr Xaa Val Xaa Asp Arg Leu Leu Xaa Thr Ser Gly Ser Pro Gly 1.0 Thr Asp Arg Xaa Phe Gly His Glu Xaa Glu Met Ala Pro Asn Ala Ser 25 Cys Leu Cys Val His Val Arg Ser Glu Glu Trp Asp Leu Met Thr Phe 35 40 Asp Ala Asn Pro Tyr Asp Ser Val Lys Lys Ile Lys Glu His Val Arg Ser Lys Thr Lys Val Pro Val Gln Asp Gln Val Leu Leu Gly Ser 70 75 Lys Ile Leu Lys Pro Arg Arg Ser Leu Ser Ser Tyr Gly Ile Asp Lys 85 90 95 Glu Lys Thr Ile His Leu Thr Leu Lys Val Val Lys Pro Ser Asp Glu 100 105 Glu Leu Pro Leu Phe Leu Val Glu Ser Gly Asp Glu Ala Lys Arg His 120 Leu Leu Gln Val Arg Arg Ser Ser Val Ala Gln Val Lys Ala Met 130 135 Ile Glu Thr Lys Thr Gly Ile Ile Pro Glu Thr Gln Ile Val Thr Cys 145 150 155 Asn Gly Lys Arg Leu Glu Asp Gly Lys Met Met Ala Asp Tyr Gly Ile 165 170 Arg Lys Gly Asn Leu Leu Phe Leu Ala Xaa Tyr Cys Ile Gly Gly 180 185

<210> 1318

<211> 230

<212> PRT

<213> Homo sapiens

1360

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Arg 1	Asn	Leu	Gln	Glu 5	Thr	Ala	Ile	Met	Ala 10	Glu	Lys	Pro	Lys	Leu 15	His
Tyr	Phe	Asn	Ala 20	Arg	Gly	Arg	Met	Glu 25	Ser	Thr	Arg	Trp	Leu 30	Leu	Ala
Ala	Ala	Gly 35	Val	Glu	Phe	Glu	Glu 40	Lys	Phe	Ile	Lys	Ser 45	Ala	Glu	Asp
Leu	Asp 50	Lys	Leu	Arg	Asn	Asp 55	Gly	Tyr	Leu	Met	Phe 60	Gln	Gln	Val	Pro
Met 65	Val	Glu	Ile	Asp	Gly 70	Met	Lys	Leu	Val	Gln 75	Thr	Arg	Ala	Ile	Leu 80
Asn	Tyr	Ile	Ala	Ser 85	Lys	Tyr	Asn	Leu	туr 90	Gly	Lys	Asp	Ile	Lys 95	Glu
Arg	Ala	Leu	Ile 100	Asp	Met	Tyr	Ile	Glu 105	Gly	Ile	Ala	Asp	Leu 110	Gly	Glu
Met	Ile	Leu 115	Leu	Leu	Pro	Val	Cys 120	Pro	Pro	Glu	Glu	Lys 125	Asp	Ala	Lys
Leu	Ala 130	Leu	Ile	Lys	Glu	Lys 135	Ile	Lys	Asn	Arg	Tyr 140	Phe	Pro	Ala	Phe
Glu 145	Lys	Val	Leu	Lys	Ser 150	His	Gly	Gln	Asp	Туг 155	Leu	Val	Gly	Asn	Lys 160
Leu	Ser	Arg	Ala	Asp 165	Ile	His	Leu	Val	Glu 170	Leu	Leu	Tyr	Tyr	Val 175	Glu
Glu	Leu	Asp	Ser 180	Ser	Leu	Ile	Ser	Ser 185	Phe	Pro	Leu	Leu	Lys 190	Ala	Leu
Lys	Thr	Arg 195	Ile	Ser	Asn	Leu	Pro 200	Thr	Val	Lys	Lys	Phe 205	Leu	Gln	Pro
Gly	Ser 210	Pro	Arg	Lys	Pro	Pro 215	Met	Asp	Glu	Lys	Ser 220	Leu	Glu	Glu	Ala

<210> 1319 <211> 279

Arg Lys Ile Phe Arg Phe 225 230

<212> PRT <213> Homo sapiens <400> 1319 Glu Gly Pro Ala Glu Gly Asn Met Ala Ala Lys Val Phe Glu Ser Ile Gly Lys Phe Gly Leu Ala Leu Ala Val Ala Gly Gly Val Val Asn Ser Ala Leu Tyr Asn Val Asp Ala Gly His Arg Ala Val Ile Phe Asp Arg Phe Arg Gly Val Gln Asp Ile Val Val Gly Glu Gly Thr His Phe Leu Ile Pro Trp Val Gln Lys Pro Ile Ile Phe Asp Cys Arg Ser Arg Pro Arg Asn Val Pro Val Ile Thr Gly Ser Lys Asp Leu Gln Asn Val Asn 90 Ile Thr Leu Arg Ile Leu Phe Arg Pro Val Ala Ser Gln Leu Pro Arg 100 105 Ile Phe Thr Ser Ile Gly Glu Asp Tyr Asp Glu Arg Val Leu Pro Ser Ile Thr Thr Glu Ile Leu Lys Ser Val Val Ala Arg Phe Asp Ala Gly 135 Glu Leu Ile Thr Gln Arg Glu Leu Val Ser Arg Gln Val Ser Asp Asp 145 150 155 Leu Thr Glu Arg Ala Ala Thr Phe Gly Leu Ile Leu Asp Asp Val Ser 170 Leu Thr His Leu Thr Phe Gly Lys Glu Phe Thr Glu Ala Val Glu Ala 180 185 190 Lys Gln Val Ala Gln Gln Glu Ala Glu Arg Ala Arg Phe Val Val Glu 195 Lys Ala Glu Gln Gln Lys Lys Ala Ala Ile Ile Ser Ala Glu Gly Asp 215 220 Ser Lys Ala Ala Glu Leu Ile Ala Asn Ser Leu Ala Thr Ala Gly Asp 225 230 235

Gly Leu Ile Glu Leu Arg Lys Leu Glu Ala Ala Glu Asp Ile Ala Tyr

250

1362

Gln Leu Ser Arg Ser Arg Asn Ile Thr Tyr Leu Pro Ala Gly Gln Ser 260 265 270

Val Leu Leu Gln Leu Pro Gln 275

<210> 1320

<211> 406

<212> PRT

<213> Homo sapiens

<400> 1320

Val Thr Ala Cys Ala Ala Pro Ala Ala Trp Leu Pro Ile Leu Val Ala 1 5 10 15

Asp Ile Trp Ser Ser Tyr Asn Met Ala Asp Ile Asp Asn Lys Glu Gln
20 25 30

Ser Glu Leu Asp Gln Asp Leu Asp Asp Val Glu Glu Val Glu Glu Glu 45

Glu Thr Gly Glu Glu Thr Lys Leu Lys Ala Arg Gln Leu Thr Val Gln 50 60

Met Met Gln Asn Pro Gln Ile Leu Ala Ala Leu Gln Glu Arg Leu Asp
65 70 75 80

Gly Leu Val Glu Thr Pro Thr Gly Tyr Ile Glu Ser Leu Pro Arg Val $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$

Val Lys Arg Arg Val Asn Ala Leu Lys Asn Leu Gln Val Lys Cys Ala 100 105 110

Gln Ile Glu Ala Lys Phe Tyr Glu Glu Val His Asp Leu Glu Arg Lys
115 120 125

Tyr Ala Val Leu Tyr Gln Pro Leu Phe Asp Lys Arg Phe Glu Ile Ile 130 $$135\$

Asn Ala Ile Tyr Glu Pro Thr Glu Glu Glu Cys Glu Trp Lys Pro Asp 145 150 155 160

Glu Glu Asp Glu Ile Ser Glu Glu Leu Lys Glu Lys Ala Lys Ile Glu
165 170 175

Asp Glu Lys Lys Asp Glu Glu Lys Glu Asp Pro Lys Gly Ile Pro Glu 180 185 190

Phe Trp Leu Thr Val Phe Lys Asn Val Asp Leu Leu Ser Asp Met Val 200 Gln Glu His Asp Glu Pro Ile Leu Lys His Leu Lys Asp Ile Lys Val 215 Lys Phe Ser Asp Ala Gly Gln Pro Met Ser Phe Val Leu Glu Phe His 230 Phe Glu Pro Asn Glu Tyr Phe Thr Asn Glu Val Leu Thr Lys Thr Tyr 245 250 Arg Met Arg Ser Glu Pro Asp Asp Ser Asp Pro Phe Ser Phe Asp Gly 260 265 Pro Glu Ile Met Gly Cys Thr Gly Cys Gln Ile Asp Trp Lys Lys Gly 275 280 Lys Asn Val Thr Leu Lys Thr Ile Lys Lys Lys Gln Lys His Lys Gly 295 Arg Gly Thr Val Arg Thr Val Thr Lys Thr Val Ser Asn Asp Ser Phe 310 315 Phe Asn Phe Phe Ala Pro Pro Glu Val Pro Glu Ser Gly Asp Leu Asp 325 330 Asp Asp Ala Glu Ala Ile Leu Ala Ala Asp Phe Glu Ile Gly His Phe 340 345 Leu Arg Glu Arg Ile Ile Pro Arg Ser Val Leu Tyr Phe Thr Gly Glu 360 Ala Ile Glu Asp Asp Asp Asp Tyr Asp Glu Glu Glu Glu Ala 370 Asp Glu Gly Tyr Gln Leu Phe Glu Glu Val Lys Ser Cys Ser Lys Leu

395

Phe Gln Arg Trp Leu Gln 405

390

<210> 1321

<211> 173

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (55) <223> Xaa equals any of the naturally occurring L-amino acids Gln Ser Ala Cys Ser Leu Leu Pro Glu Met Pro Arg Ile Leu Thr Arg Thr Pro Ser Ser Arg Met Ile Val Leu Arg Leu Met Pro Val Gly Gly Arg Arg Pro Ile Val Thr Ser Phe Gly Gly Cys Ser Thr Ala Pro Arg Ala Asn Phe Pro Leu Pro Xaa Pro Ala Leu Arg Gln Ser Arg Ser Lys Met Ala Val Val Gly Val Ser Ser Val Ser Arg Leu Leu Gly Arg Ser Arg Pro Gln Leu Gly Arg Pro Met Ser Ser Gly Ala His Gly Glu Glu 90 85 Gly Ser Ala Arg Met Trp Lys Thr Leu Thr Phe Phe Val Ala Leu Pro 100 105 Gly Val Ala Val Ser Met Leu Asn Val Tyr Leu Lys Ser His His Gly 120 Glu His Glu Arg Pro Glu Phe Ile Ala Tyr Pro His Leu Arg Ile Arg 135 Thr Lys Pro Phe Pro Trp Gly Asp Gly Asn His Thr Leu Phe His Asn 145 150 155 160 Pro His Val Asn Pro Leu Pro Thr Gly Tyr Glu Asp Glu 165 170

<210> 1322 <211> 209 <212> PRT <213> Homo sapiens

<400> 1322
Lys Thr Gln Ala Ala Ser Val Glu Ala Val Lys Met Leu Asp Glu Ile
1 5 10 15

Leu Leu Gln Leu Ser Ala Ser Val Pro Val Asp Val Met Pro Gly Glu 20 25 30

1365

Phe Asp Pro Thr Asn Tyr Thr Leu Pro Gln Gln Pro Leu His Pro Cys
35 40 45

Met Phe Pro Leu Ala Thr Ala Tyr Ser Thr Leu Gln Leu Val Thr Asn 50 55 60

Pro Tyr Gln Ala Thr Ile Asp Gly Val Arg Phe Leu Gly Thr Ser Gly 65 70 75 80

Gln Asn Val Ser Asp Ile Phe Arg Tyr Ser Ser Met Glu Asp His Leu 85 90 95

Glu Ile Leu Glu Trp Thr Leu Arg Val Arg His Ile Ser Pro Thr Ala 100 105 110

Pro Asp Thr Leu Gly Cys Tyr Pro Phe Tyr Lys Thr Asp Pro Phe Ile 115 120 125

Phe Pro Glu Cys Pro His Val Tyr Phe Cys Gly Asn Thr Pro Ser Phe 130 135 140

Gly Ser Lys Ile Ile Arg Gly Pro Glu Asp Gln Thr Val Leu Leu Val 145 150 155 160

Thr Val Pro Asp Phe Ser Ala Thr Gln Thr Ala Cys Leu Val Asn Leu 165 170 175

Arg Ser Leu Ala Cys Gln Pro Ile Ser Phe Ser Gly Phe Gly Ala Glu 180 185 190

Asp Asp Leu Gly Gly Leu Gly Trp Ala Pro Asp Ser Lys Lys Trp 195 200 205

Phe

<210> 1323

<211> 291

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (57)

1366

<223> Xaa equals any of the naturally occurring L-amino acids <400> 1323 Asn Asn Val Ala Thr Thr His Glu Pro Ala Ser Val Pro Ala Pro Gln Gly Asp Leu Leu Ser Gly Ala Glu Pro Glu Gly Gly Asn Xaa Ala Arg Arg Pro Pro Gly Ala Arg Glu Gln Pro Gln Ser Pro Pro Pro Ala Arg 40 Gly Gly Ala Gly Ser Leu Ala Thr Xaa Ala Pro Pro Ser Ser Gly Leu Ser Cys Pro Gly Cys Phe Arg Leu Arg Leu Trp Met Leu Arg Leu Ser 65 70 Glu Arg Asn Met Lys Val Leu Leu Ala Ala Leu Ile Ala Gly Ser Val Phe Phe Leu Leu Pro Gly Pro Ser Ala Ala Asp Glu Lys Lys 105 Lys Gly Pro Lys Val Thr Val Lys Val Tyr Phe Asp Leu Arg Ile Gly Asp Glu Asp Val Gly Arg Val Ile Phe Gly Leu Phe Gly Lys Thr Val 135 Pro Lys Thr Val Asp Asn Phe Val Ala Leu Ala Thr Gly Glu Lys Gly 150 155 Phe Gly Tyr Lys Asn Ser Lys Phe His Arg Val Ile Lys Asp Phe Met 165 Ile Gln Gly Gly Asp Phe Thr Arg Gly Asp Gly Thr Gly Gly Lys Ser 180 185 Ile Tyr Gly Glu Arg Phe Pro Asp Glu Asn Phe Lys Leu Lys His Tyr 200 Gly Pro Gly Trp Val Ser Met Ala Asn Ala Gly Lys Asp Thr Asn Gly 210 215 Ser Gln Phe Phe Ile Thr Thr Val Lys Thr Ala Trp Leu Asp Gly Lys 225 230 235 His Val Val Phe Gly Lys Val Leu Glu Gly Met Glu Val Val Arg Lys 245 250

Val Glu Ser Thr Lys Thr Asp Ser Arg Asp Lys Pro Leu Lys Asp Val 260 265 270

Ile Ile Ala Asp Cys Gly Lys Ile Glu Val Glu Lys Pro Phe Ala Ile
275 280 285

Ala Lys Glu 290

<210> 1324

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1324

Glu Cys Leu Val Arg Ser Lys Asn Ile Thr Gln Ile Val Gly His Ser 1 5 10 15

Gly Cys Glu Ala Lys Ser Ile Gln Asn Arg Ala Cys Leu Gly Gln Cys
20 25 30

Phe Ser Tyr Ser Val Pro Asn Thr Phe Pro Gln Ser Thr Glu Ser Leu 35 40 45

Val His Cys Asp Ser Cys Met Pro Ala Gln Ser Met Trp Glu Ile Val 50 55 60

Thr Leu Glu Cys Pro Gly His Glu Glu Val Pro Arg Val Asp Lys Leu 65 70 75 80

Val Glu Lys Ile Leu His Cys Ser Cys Gln Ala Cys Gly Lys Glu Pro 85 90 95

Ser His Glu Gly Leu Ser Val Tyr Val Gln Gly Glu Asp Gly Pro Gly 100 105 110

Ser Gln Pro Gly Thr His Pro His Pro His Pro His Pro Gly
115 120 125

Gly Gln Thr Pro Glu Pro Glu Asp Pro Pro Gly Ala Pro His Thr Glu 130 135 140

Glu Glu Gly Ala Glu Asp 145 150

<210> 1325

<211> 56

1368

<212> PRT

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<213> Homo sapiens
<400> 1325
Glu Ile Asn Ile Ser Arg Lys Gly Glu Ser Arg Phe Tyr Lys Met Ser
                                     10
Gln Leu Ser Asn Ile Trp Gly Ser Asp Ser Phe Phe Val Arg Thr Phe
Glu Thr Ser Lys Gln Pro Leu Phe Leu Lys Asn Ser Gly Phe Thr Leu
                             40
Thr His Val Ser Phe Thr Pro Phe
     50
<210> 1326
<211> 486
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (438)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (447)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1326
Arg Leu Pro Leu Gly Ser Arg Ser Pro Ser Glu Ala Ala Gly Ala Glu
                                    10
Thr Ala Pro Ser Ser Leu Ser Ala Ala Met Thr Pro Leu Val Ser Arg
             20
Leu Xaa Arg Leu Trp Ala Ile Met Arg Lys Pro Arg Ala Ala Val Gly
                             40
Ser Gly His Arg Lys Gln Ala Ala Ser Gln Glu Gly Arg Gln Lys His
                         55
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65	гля	ASII	ASII	sei	70	Ala	гуз	PIO	ser	75	Cys	АЅР	GIÀ	ьeu	80
Arg	Gln	Pro	Glu	Glu 85	Val	Val	Leu	Gln	Ala 90	Ser	Val	Ser	Ser	Tyr 95	His
Leu	Phe	Arg	Asp 100	Val	Ala	Glu	Val	Thr 105	Ala	Phe	Arg	Gly	Ser 110	Leu	Leu
Ser	Trp	Tyr 115	Asp	Gln	Glu	Lys	Arg 120	Asp	Leu	Pro	Trp	Arg 125	Arg	Arg	Ala
Glu	Asp 130	Glu	Met	Asp	Leu	Asp 135	Arg	Arg	Ala	Tyr	Ala 140	Val	Trp	Val	Ser
Glu 145	Val	Met	Leu	Gln	Gln 150	Thr	Gln	Val	Ala	Thr 155	Val	Ile	Asn	Tyr	туr 160
Thr	Gly	Trp	Met	Gln 165	Lys	Trp	Pro	Thr	Leu 170	Gln	Asp	Leu	Ala	Ser 175	Ala
			180		Asn			185					190		
		195			Gln		200					205			
Gly	Gly 210	His	Met	Pro	Arg	Thr 215	Ala	Glu	Thr	Leu	Gln 220	Gln	Leu	Leu	Pro
225					Thr 230					235					240
				245	Val				250					255	
			260	_	Ala	_		265					270		
		275			Gln		280					285			
	290				Met	295					300				
305			-		Gln 310	_				315					320
Gln	Arg	Val	Glu	Gln	Glu	Gln	Leu	Leu	Ala 330	Ser	Gly	Ser	Leu	Ser	Gly

Ser Pro Asp Val Glu Glu Cys Ala Pro Asn Thr Gly Gln Cys His Leu $340 \hspace{1.5cm} 345 \hspace{1.5cm} 350$

Cys Leu Pro Pro Ser Glu Pro Trp Asp Gln Thr Leu Gly Val Val Asn 355 360 365

Phe Pro Arg Lys Ala Ser Arg Lys Pro Pro Arg Glu Glu Ser Ser Ala 370 375 380

Thr Cys Val Leu Glu Gln Pro Gly Ala Leu Gly Ala Gln Ile Leu Leu 385 390 395 400

Val Gln Arg Pro Asn Ser Gly Leu Leu Ala Gly Leu Trp Glu Phe Pro 405 410 415

Ser Val Thr Trp Glu Pro Ser Glu Gln Leu Gln Arg Lys Ala Leu Leu 420 425 430

Gln Glu Leu Gln Arg Xaa Ala Gly Pro Leu Pro Ala Thr His Xaa Arg 435 440 445

His Leu Gly Glu Val Val His Thr Phe Ser His Ile Lys Leu Thr Tyr 450 455 460

Gln Val Tyr Gly Leu Ala Leu Glu Gly Gln Thr Pro Val Thr Thr Val 465 470 475 480

Pro Pro Gly Ala Arg Cys 485

<210> 1327

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1327

Lys Thr Leu Phe Thr Tyr Ser Phe His Gly Tyr Asn Thr Leu Ala Asp 1 5 10 15

Phe Leu Leu Ala Leu Gly Ala Met Ile Leu Ile Thr Phe Cys Lys Val 20 25 30

Thr Asn Val Ile His Ser Thr Leu Cys Gly Ser His Leu Phe Arg Leu
35 40 45

Met Cys Phe Gly Glu Arg Lys Lys Phe Leu Ala Glu Tyr Tyr Phe Glu 50 55 60

Leu Ser Arg Thr Leu Ser His Gln Arg Gln Phe Phe Ser Val Gln Phe

1371

 65
 70
 75
 80

Pro Ile Pro Asp Asn Leu Leu Lys 85

<210> 1328

<211> 424

<212> PRT

<213> Homo sapiens

<400> 1328

Ile Arg Val Ser Phe Met Asn Asn Gln Lys Gln Gln Lys Pro Thr Leu
1 5 10 15

Ser Gly Gln Arg Phe Lys Thr Arg Lys Arg Asp Glu Lys Glu Arg Phe 20 25 30

Asp Pro Thr Gln Phe Gln Asp Cys Ile Ile Gln Gly Leu Thr Glu Thr 35 40 45

Gly Thr Asp Leu Glu Ala Val Ala Lys Phe Leu Asp Ala Ser Gly Ala 50 55 60

Lys Leu Asp Tyr Arg Arg Tyr Ala Glu Thr Leu Phe Asp Ile Leu Val 65 70 75 80

Ala Gly Gly Met Leu Ala Pro Gly Gly Thr Leu Ala Asp Asp Met Met 85 90 95

Arg Thr Asp Val Cys Val Phe Ala Ala Gln Glu Asp Leu Glu Thr Met 100 105 110

Gln Ala Phe Ala Gln Val Phe Asn Lys Leu Ile Arg Arg Tyr Lys Tyr 115 120 125

Leu Glu Lys Gly Phe Glu Asp Glu Val Lys Lys Leu Leu Phe Leu 130 135 140

Lys Gly Phe Ser Glu Ser Glu Arg Asn Lys Leu Ala Met Leu Thr Gly 145 150 155 160

Val Leu Leu Ala Asn Gly Thr Leu Asn Ala Ser Ile Leu Asn Ser Leu 165 170 175

Tyr Asn Glu Asn Leu Val Lys Glu Gly Val Ser Ala Ala Phe Ala Val
180 185 190

Lys Leu Phe Lys Ser Trp Ile Asn Glu Lys Asp Ile Asn Ala Val Ala 195 200 205

PCT/US00/05882

Ala	Ser 210	Leu	Arg	Lys	Val	Ser 215	Met	Asp	Asn	Arg	Leu 220	Met	Glu	Leu	Phe
Pro 225	Ala	Asn	Lys	Gln	Ser 230	Val	Glu	His	Phe	Thr 235	Lys	Tyr	Phe	Thr	Glu 240
Ala	Gly	Leu	Lys	Glu 245	Leu	Ser	Glu	Tyr	Val 250	Arg	Asn	Gln	Gln	Thr 255	Ile
Gly	Ala	Arg	Lys 260	Glu	Leu	Gln	Lys	Glu 265	Leu	Gln	Glu	Gln	Met 270	Ser	Arg
Gly	Asp	Pro 275	Phe	Lys	Asp	Ile	Ile 280	Leu	Tyr	Val	Lys	Glu 285	Glu	Met	Lys
Lys	Asn 290	Asn	Ile	Pro	Glu	Pro 295	Val	Val	Ile	Gly	Ile 300	Val	Trp	Ser	Ser
Val 305	Met	Ser	Thr	Val	Glu 310	Trp	Asn	Lys	Lys	Glu 315	Glu	Leu	Val	Ala	Glu 320
Gln	Ala	Ile	Lys	His 325	Leu	Lys	Gln	Tyr	Ser 330	Pro	Leu	Leu	Ala	Ala 335	Phe
Thr	Thr	Gln	Gly 340	Gln	Ser	Glu	Leu	Thr 345	Leu	Leu	Leu	Lys	Ile 350	Gln	Glu
Tyr	Cys	Туг 355	Asp	Asn	Ile	His	Phe 360	Met	Lys	Ala	Phe	Gln 365	Lys	Ile	Val
Val	Leu 370	Phe	Tyr	Lys	Ala	Glu 375	Val	Leu	Ser	Glu	Glu 380	Pro	Ile	Leu	Lys
Trp 385	Tyr	Lys	Asp	Ala	His 390	Val	Ala	Lys	Gly	Lys 395	Ser	Val	Phe	Leu	Glu 400
Gln	Met	Lys	Lys	Phe 405	Val	Glu	Trp	Leu	Lys 410	Asn	Ala	Glu	Glu	Glu 415	Ser
Glu	Ser	Glu	Δla	Glu	Glu	Glv	Acn								

<210> 1329

<211> 558

<212> PRT

<213> Homo sapiens

420

<400> 1329

WO 00/55350

Trp 1	Tyr	Cys	Ser	Val 5	Gly	Leu	Ala	Ser	Thr 10	Ala	Gly	Glu	Gln	Ala 15	Ala
Ala	Val	Ala	Ala 20	Ala	Phe	Ser	Leu	His 25	Pro	Asp	Tyr	Ala	Met 30	Leu	Gly
Phe	Val	Gly 35	Arg	Val	Ala	Ala	Ala 40	Pro	Ala	Ser	Gly	Ala 45	Leu	Arg	Arg
Leu	Thr 50	Pro	Ser	Ala	Ser	Leu 55	Pro	Pro	Ala	Gln	Leu 60	Leu	Leu	Arg	Ala
Ala 65	Pro	Thr	Ala	Val	His 70	Pro	Val	Arg	Asp	Tyr 75	Ala	Ala	Gln	Thr	Ser 80
Pro	Ser	Pro	Lys	Ala 85	Gly	Ala	Ala	Thr	Gly 90	Arg	Ile	Val	Ala	Val 95	Ile
Gly	Ala	Val	Val 100	Asp	Val	Gln	Phe	Asp 105	Glu	Gly	Leu	Pro	Pro 110	Ile	Leu
Asn	Ala	Leu 115	Glu	Val	Gln	Gly	Arg 120	Glu	Thr	Arg	Leu	Val 125	Leu	Glu	Val
Ala	Gln 130	His	Leu	Gly	Glu	Ser 135	Thr	Val	Arg	Thr	Ile 140	Ala	Met	Asp	Gly
Thr 145	Glu	Gly	Leu	Val	Arg 150	Gly	Gln	Lys	Val	Leu 155	Asp	Ser	Gly	Ala	Pro 160
Ile	Lys	Ile	Pro	Val 165	Gly	Pro	Glu	Thr	Leu 170	Gly	Arg	Ile	Met	Asn 175	Val
Ile	Gly	Glu	Pro 180	Ile	Asp	Glu	Arg	Gly 185	Pro	Ile	Lys	Thr	Lys 190	Gln	Phe
Ala	Pro	Ile 195	His	Ala	Glu	Ala	Pro 200	Glu	Phe	Met	Glu	Met 205	Ser	Val	Glu
Gln	Glu 210	Ile	Leu	Val	Thr	Gly 215	Ile	Lys	Val	Val	Asp 220	Leu	Leu	Ala	Pro
Tyr 225	Ala	Lys	Gly	Gly	Lys 230	Ile	Gly	Leu	Phe	Gly 235	Gly	Ala	Gly	Val	Gly 240
Lys	Thr	Val	Leu	Ile 245	Met	Glu	Leu	Ile	Asn 250	Asn	Val	Ala	Lys	Ala 255	His
Gly	Gly	Tyr	Ser 260	Val	Phe	Ala	Gly	Val 265	Gly	Glu	Arg	Thr	Arg 270	Glu	Gly

Asn	Asp	Leu 275	Tyr	His	Glu	Met	Ile 280	Glu	Ser	Gly	Val	Ile 285	Asn	Leu	Lys
Asp	Ala 290	Thr	Ser	Lys	Val	Ala 295	Leu	Val	Tyr	Gly	Gln 300	Met	Asn	Glu	Pro
Pro 305	Gly	Ala	Arg	Ala	Arg 310	Val	Ala	Leu	Thr	Gly 315	Leu	Thr	Val	Ala	Glu 320
Tyr	Phe	Arg	Asp	Gln 325	Glu	Gly	Gln	Asp	Val 330	Leu	Leu	Phe	Ile	Asp 335	Asn
Ile	Phe	Arg	Phe 340	Thr	Gln	Ala	Gly	Ser 345	Glu	Val	Ser	Ala	Leu 350	Leu	Gly
Arg	Ile	Pro 355	Ser	Ala	Val	Gly	Tyr 360	Gln	Pro	Thr	Leu	Ala 365	Thr	Asp	Met
Gly	Thr 370	Met	Gln	Glu	Arg	Ile 375	Thr	Thr	Thr	Lys	Lys 380	Gly	Ser	Ile	Thr
Ser 385	Val	Gln	Ala	Ile	Tyr 390	Val	Pro	Ala	Asp	Asp 395	Leu	Thr	Asp	Pro	Ala 400
Pro	Ala	Thr	Thr	Phe 405	Ala	His	Leu	Asp	Ala 410	Thr	Thr	Val	Leu	Ser 415	Arg
Ala	Ile	Ala	Glu 420	Leu	Gly	Ile	Tyr	Pro 425	Ala	Val	Asp	Pro	Leu 430	Asp	Ser
Thr	Ser	Arg 435	Ile	Met	Asp	Pro	Asn 440	Ile	Val	Gly	Ser	Glu 445	His	Tyr	Asp
Val	Ala 450	Arg	Gly	Val	Gln	Lys 455	Ile	Leu	Gln	Asp	Tyr 460	Lys	Ser	Leu	Gln
Asp 465	Ile	Ile	Ala	Ile	Leu 470	Gly	Met	Asp	Glu	Leu 475	Ser	Glu	Glu	Asp	Lys 480
Leu	Thr	Val	Ser	Arg 485	Ala	Arg	Lys	Ile	Gln 490	Arg	Phe	Leu	Ser	Gln 495	Pro
Phe	Gln	Val	Ala 500	Glu	Val	Phe	Thr	Gly 505	His	Met	Gly	Lys	Leu 510	Val	Pro
Leu	Lys	Glu 515	Thr	Ile	Lys	Gly	Phe 520	Gln	Gln	Ile	Leu	Ala 525	Gly	Glu	Tyr
Asp	His 530	Leu	Pro	Glu	Gln	Ala 535	Phe	Tyr	Met	Val	Gly 540	Pro	Ile	Glu	Glu

Ala Val Ala Lys Ala Asp Lys Leu Ala Glu Glu His Ser Ser 545 550 555

<210> 1330

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1330

Thr Thr Pro Leu Ser Gln Ile Val Ala Arg Gly Leu Ile Ala Arg Gly 1 5 10 15

Val Pro Gly Ala Ile Val Asn Val Ser Ser Gln Cys Ser Gln Arg Ala 20 25 30

Val Thr Asn His Ser Val Tyr Cys Ser Thr Lys Gly Ala Leu Asp Met \$35\$ \$40\$ \$45\$

Leu Thr Lys Val Met Ala Leu Glu Leu Gly Pro His Lys Ile Arg Val 50 55 60

Asn Ala Val Asn Pro Thr Val Val Met Thr Ser Met Gly Gln Ala Thr 65 70 75 80

Trp Ser Asp Pro His Lys Ala Lys Thr Met Leu Asn Arg Ile Pro Leu 85 90 95

Gly Lys Phe Ala Glu Val Glu His Val Val Asn Ala Ile Leu Phe Leu $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110$

Leu Ser Asp Arg Ser Gly Met Thr Thr Gly Ser Thr Leu Pro Val Glu
115 120 125

Gly Gly Phe Trp Ala Cys
130

<210> 1331

<211> 188

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (135)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

1376

<221> SITE <222> (137) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1331 Ile Arg His Glu Pro Ser Arg Cys Arg Ser Arg Thr Ala Ala Val Cys Ser Pro Pro Pro Cys Pro Pro Trp Arg Pro Arg Gly Pro Trp Thr 25 Ala Lys Ser Pro Pro Trp Pro Pro Ala Arg Pro Arg Trp Gln Trp Thr 40 Arg Ala Leu Asn Ser Thr Ala Ala Pro Pro Arg Ser Pro Pro Ala Pro 55 Cys Pro Cys Arg Pro Asn Ser Ala Arg Arg Lys Arg Arg Pro Pro Ala 75 70 Asn Cys Arg Ala Ser Ser Gly Trp Leu Ala Ala Trp Lys Pro Ser Arg 85 Thr Gly Pro Ala Ala Arg Pro Arg Pro Val Pro Asp Thr Ser Phe 105 His Ser Ser Pro Val Gln Ala Ala Val His Phe Val Gly Tyr Lys Ile 120 Asn His Gly Pro Ala Met Xaa Leu Xaa Phe Leu Leu Gln Leu Arg Leu 135 130 Gly Arg Gly Pro Gly Leu Pro Arg Glu Asn Val Leu Glu Thr Ala Pro 150 155 Val Phe Leu Ala Trp Phe Ile Cys Pro Gly Ser Gly Ser Asp Ser Gly 165 170

Gly Ser Glu Thr Ser Val Ala Leu Ser Tyr Trp Gly

<210> 1332 <211> 237

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1332

Asp Asp Arg Arg Xaa Asp Ala Glu Ala Asp Lys Met Ala Ala Ala 1 5 10 15

Val Gln Gly Gly Arg Ser Gly Gly Ser Gly Gly Cys Ser Gly Ala Gly
20 25 30

Gly Ala Ser Asn Cys Gly Thr Gly Ser Gly Arg Ser Gly Leu Leu Asp $35 \hspace{1cm} 40 \hspace{1cm} 45$

Lys Trp Lys Ile Asp Asp Lys Pro Val Lys Ile Asp Lys Trp Asp Gly 50 55 60

Ser Ala Val Lys Asn Ser Leu Asp Asp Ser Ala Lys Lys Val Leu Leu 65 70 75 80

Glu Lys Tyr Lys Tyr Val Glu Asn Phe Gly Leu Ile Asp Gly Arg Leu 85 90 95

Thr Ile Cys Thr Ile Ser Cys Phe Phe Ala Ile Val Ala Leu Ile Trp
100 105 110

Asp Tyr Met His Pro Phe Pro Glu Ser Lys Pro Val Leu Ala Leu Cys 115 120 125

Val Ile Ser Tyr Phe Val Met Met Gly Ile Leu Thr Ile Tyr Thr Ser 130 135 140

Tyr Lys Glu Lys Ser Ile Phe Leu Val Ala His Arg Lys Asp Pro Thr 145 150 155 160

Gly Met Asp Pro Asp Asp Ile Trp Gln Leu Ser Ser Ser Leu Lys Arg 165 170 175

Phe Asp Asp Lys Tyr Thr Leu Lys Leu Thr Phe Ile Ser Gly Arg Thr 180 185 190

Lys Gln Gln Arg Glu Ala Glu Phe Thr Lys Ser Ile Ala Lys Phe Phe 195 200 205

Asp His Ser Gly Thr Leu Val Met Asp Ala Tyr Glu Pro Glu Ile Ser 210 215 220

Arg Leu His Asp Ser Leu Ala Ile Glu Arg Lys Ile Lys 225 230 235

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1333

Thr Thr Ala Asn Pro Leu Lys Thr Arg Gly Leu Ala Leu Val Ala Gln
1 5 10 15

Pro Lys Val Ala Leu Gln Ile Phe Glu Arg Ala Thr Ala Thr Phe Leu 20 25 30

Pro Ser Gln Leu Ser Leu Asp Phe Ser Glu Ser Gly Tyr Cys Tyr Pro $35 \hspace{1cm} 40 \hspace{1cm} 45$

Asn Val Cys Leu Tyr Glu Cys Ile 50 55

<210> 1334

<211> 207

<212> PRT

<213> Homo sapiens

<400> 1334

Ser His Pro Ala Cys Ala Lys Val Glu Tyr Ala Tyr Ser Asp Asn Ser 1 5 10 15

Leu Asp Pro Asp Asp Glu Asp Ser Asp Tyr His Gln Glu Ala Tyr Lys 20 25 30

Glu Ser Tyr Lys Asp Arg Arg Arg Arg Ala His Thr Gln Ala Glu Gln 35 40 45

Lys Arg Arg Asp Ala Ile Lys Arg Gly Tyr Asp Asp Leu Gln Thr Ile 50 60

Val Pro Thr Cys Gln Gln Gln Asp Phe Ser Ile Gly Ser Gln Lys Leu 65 70 75 80

Ser Lys Ala Ile Val Leu Gln Lys Thr Ile Asp Tyr Ile Gln Phe Leu 85 90 95

His Lys Glu Lys Lys Lys Gln Glu Glu Glu Val Ser Thr Leu Arg Lys 100 105 110

Asp Val Thr Ala Leu Lys Ile Met Lys Val Asn Tyr Glu Gln Ile Val 115 120 125

Lys Ala His Gln Asp Asn Pro His Glu Gly Glu Asp Gln Val Ser Asp 130 135 140

Gln Val Lys Phe Asn Val Phe Gln Gly Ile Met Asp Ser Leu Phe Gln 145 150 155 Ser Phe Asn Ala Ser Ile Ser Val Ala Ser Phe Gln Glu Leu Ser Ala 170 165 Cys Val Phe Ser Trp Ile Glu Glu His Cys Lys Pro Gln Thr Leu Arg Glu Ile Val Ile Gly Val Leu His Gln Leu Lys Asn Gln Leu Tyr 200 <210> 1335 <211> 1005 <212> PRT <213> Homo sapiens <400> 1335 Arg Val Leu Gln Tyr Val Val Pro Glu Val Lys Asp Leu Tyr Asn Trp 10 Leu Glu Val Glu Phe Asn Pro Leu Lys Leu Cys Glu Arg Val Thr Lys Val Leu Asn Trp Val Arg Glu Gln Pro Glu Lys Glu Pro Glu Leu Gln 40 Gln Tyr Val Pro Gln Leu Gln Asn Asn Thr Ile Leu Arg Leu Leu Gln 55 Gln Val Ser Gln Ile Tyr Gln Ser Ile Glu Phe Ser Arg Leu Thr Ser 65 70 75 Leu Val Pro Phe Val Asp Ala Phe Gln Leu Glu Arg Ala Ile Val Asp Ala Ala Arg His Cys Asp Leu Gln Val Arg Ile Asp His Thr Ser Arg 105 Thr Leu Ser Phe Gly Ser Asp Leu Asn Tyr Ala Thr Arg Glu Asp Ala 115 120 Pro Ile Gly Pro His Leu Gln Ser Met Pro Ser Glu Gln Ile Arg Asn 130 140 135 Gln Leu Thr Ala Met Ser Ser Val Leu Ala Lys Ala Leu Glu Val Ile

155

Lys	Pro	Ala	His	Ile 165	Leu	Gln	Glu	Lys	Glu 170	Glu	Gln	His	Gln	Leu 175	Ala
Val	Thr	Ala	Tyr 180	Leu	Lys	Asn	Ser	Arg 185	Lys	Glu	His	Gln	Arg 190	Ile	Leu
Ala	Arg	Arg 195	Gln	Thr	Ile	Glu	Glu 200	Arg	Lys	Glu	Arg	Leu 205	Glu	Ser	Leu
Asn	Ile 210	Gln	Arg	Glu	Lys	Glu 215	Glu	Leu	Glu	Gln	Arg 220	Glu	Ala	Glu	Leu
Gln 225	Lys	Val	Arg	Lys	Ala 230	Glu	Glu	Glu	Arg	Leu 235	Arg	Gln	Glu	Ala	Lys 240
Glu	Arg	Glu	Lys	Glu 245	Arg	Ile	Leu	Gln	Glu 250	His	Glu	Gln	Ile	Lys 255	Lys
Lys	Thr	Val	Arg 260	Glu	Arg	Leu	Glu	Gln 265	Ile	Lys	Lys	Thr	Glu 270	Leu	Gly
Ala	Lys	Ala 275	Phe	Lys	Asp	Ile	Asp 280	Ile	Glu	Asp	Leu	Glu 285	Glu	Leu	Asp
Pro	Asp 290	Phe	Ile	Met	Ala	Lys 295	Gln	Val	Glu	Gln	Leu 300	Glu	Lys	Glu	Lys
Lys 305	Glu	Leu	Gln	Glu	Arg 310	Leu	Lys	Asn	Gln	Glu 315	Lys	Lys	Ile	Asp	Tyr 320
Phe	Glu	Arg	Ala	Lys 325	Arg	Leu	Glu	Glu	Ile 330	Pro	Leu	Ile	Lys	Ser 335	Ala
Tyr	Glu	Glu	Gln 340	Arg	Ile	Lys	Asp	Met 345	Asp	Leu	Trp	Glu	Gln 350	Gln	Glu
Glu	Glu	Arg 355	Ile	Thr	Thr	Met	Gln 360	Leu	Glu	Arg	Glu	Lys 365	Ala	Leu	Glu
His	Lys 370	Asn	Arg	Met	Ser	Arg 375	Met	Leu	Glu	Asp	Arg 380	Asp	Leu	Phe	Val
Met 385	Arg	Leu	Lys	Ala	Ala 390	Arg	Gln	Ser	Val	Tyr 395	Glu	Glu	Lys	Leu	Lys 400
Gln	Phe	Glu	Glu	Arg 405	Leu	Ala	Glu	Glu	Arg 410	His	Asn	Arg	Leu	Glu 415	Glu
Arg	Lys	Arg	Gln 420	Arg	Lys	Glu	Glu	Arg 425	Arg	Ile	Thr	Tyr	Tyr 430	Arg	Glu

гàг	GLu	435	GIU	GIU	GIN	Arg	440	Ala	GIU	GIU	GIN	мет 445	Leu	гÀг	GIL
Arg	Glu 450	Glu	Arg	Glu	Arg	Ala 455	Glu	Arg	Ala	Lys	Arg 460	Glu	Glu	Glu	Leu
Arg 465	Glu	Tyr	Gln	Glu	Arg 470	Val	Lys	Ìуs	Leu	Glu 475	Glu	Val	Glu	Arg	Lys 480
Lys	Arg	Gln	Arg	Glu 485	Leu	Glu	Ile	Glu	Glu 490	Arg	Glu	Arg	Arg	Arg 495	Glu
Glu	Glu	Arg	Arg 500	Leu	Gly	Asp	Ser	Ser 505	Leu	Ser	Arg	Lys	Asp 510	Ser	Arg
Trp	Gly	Asp 515	Arg	Asp	Ser	Glu	Gly 520	Thr	Trp	Arg	Lys	Gly 525	Pro	Glu	Ala
Asp	Ser 530	Glu	Trp	Arg	Arg	Gly 535	Pro	Pro	Glu	Lys	Glu 540	Trp	Arg	Arg	Gly
Glu 545	Gly	Arg	Asp	Glu	Asp 550	Arg	Ser	His	Arg	Arg 555	Asp	Glu	Glu	Arg	Pro 560
Arg	Arg	Leu	Gly	Asp 565	Asp	Glu	Asp	Arg	Glu 570	Pro	Ser	Leu	Arg	Pro 575	Asp
Asp	Asp	Arg	Val 580	Pro	Arg	Arg	Gly	Met 585	Asp	Asp	Asp	Arg	Gly 590	Pro	Arc
Arg	Gly	Pro 595	Glu	Glu	Asp	Arg	Phe 600	Ser	Arg	Arg	Gly	Ala 605	Asp	Asp	Asp
Arg	Pro 610	Ser	Trp	Arg	Asn	Thr 615	Asp	Asp	Asp	Arg	Pro 620	Pro	Arg	Arg	Ile
Ala 625	Asp	Glu	Asp	Arg	Gly 630	Asn	Trp	Arg	His	Ala 635	Asp	Asp	Asp	Arg	Pro 640
Pro	Arg	Arg	Gly	Leu 645	Asp	Glu	Asp	Arg	Gly 650	Ser	Trp	Arg	Thr	Ala 655	Asp
Glu	Asp	Arg	Gly 660	Pro	Arg	Arg	Gly	Met 665	Asp	Asp	Asp	Arg	Gly 670	Pro	Arg
Arg	Gly	Gly 675	Ala	Asp	Asp	Glu	Arg 680	Ser	Ser	Trp	Arg	Asn 685	Ala	Asp	Asp
Asp	Arg 690	Gly	Pro	Arg	Arg	Gly 695	Leu	Asp	Asp	Asp	Arg 700	Gly	Pro	Arg	Arg

Gly 705	Met	Asp	Asp	Asp	Arg 710	Gly	Pro	Arg	Arg	Gly 715	Met	Asp	Asp	Asp	Arg 720
Gly	Pro	Arg	Arg	Gly 725	Met	Asp	Asp	Asp	Arg 730	Gly	Pro	Arg	Arg	Gly 735	Leu
Asp	Asp	Asp	Arg 740	Gly	Pro	Trp	Arg	Asn 745	Ala	Asp	Asp	Asp	Arg 750	Ile	Pro
Arg	Arg	Gly 755	Ala	Glu	Asp	Asp	Arg 760	Gly	Pro	Trp	Arg	Asn 765	Met	Asp	Asp
Asp	Arg 770	Leu	Ser	Arg	Arg	Ala 775	Asp	Asp	Asp	Arg	Phe 780	Pro	Arg	Arg	Gly
Asp 785	Asp	Ser	Arg	Pro	Gly 790	Pro	Trp	Arg	Pro	Leu 795	Val	Lys	Pro	Gly	Gly 800
Trp	Arg	Glu	Lys	Glu 805	Lys	Ala	Arg	Glu	Glu 810	Ser	Trp	Gly	Pro	Pro 815	Arg
Glu	Ser	Arg	Pro 820	Ser	Glu	Glu	Arg	Glu 825	Trp	Asp	Arg	Glu	Lys 830	Glu	Arg
Asp	Arg	Asp 835	Asn	Gln	Asp	Arg	Glu 840	Glu	Asn	Asp	Lys	Asp 845	Pro	Glu	Arg
Glu	Arg 850	Asp	Arg	Glu	Arg	Asp 855	Val	Asp	Arg	Glu	Asp 860	Arg	Phe	Arg	Arg
Pro 865	Arg	Asp	Glu	Gly	Gly 870	Trp	Arg	Arg	Gly	Pro 875	Ala	Glu	Glu	Ser	Ser 880
Ser	Trp	Arg	Asp	Ser 885	Ser	Arg	Arg	Asp	Asp 890	Arg	Asp	Arg	Asp	Asp 895	Arg
Arg	Arg	Glu	Arg 900	Asp	Asp	Arg	Arg	Asp 905	Leu	Arg	Glu	Arg	Arg 910	Asp	Leu
Arg	Asp	Asp 915	Arg	Asp	Arg	Arg	Gly 920	Pro	Pro	Leu	Arg	Ser 925	Glu	Arg	Glu
Glu	Val 930	Ser	Ser	Trp	Arg	Arg 935	Ala	Asp	Asp	Arg	Lys 940	Asp	Asp	Arg	Val
Glu 945	Glu	Arg	Asp	Pro	Pro 950	Arg	Arg	Val	Pro	Pro 955	Pro	Ala	Leu	Ser	Arg 960
Asp	Arg	Glu	Arg	Asp 965	Arg	Asp	Arg	Glu	Arg 970	Glu	Gly	Glu	Lys	Glu 975	Lys

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Ala Ser Trp Arg Ala Glu Lys Asp Arg Glu Ser Leu Arg Arg Thr Lys
            980
                                 985
Asn Glu Thr Asp Glu Asp Gly Trp Thr Thr Val Arg Arg
                           1000
<210> 1336
<211> 231
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1336
Ala Gly Ile His Pro Met Asn Ser Ile Ser Ser Leu Asp Arg Thr Arg
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1384

Met Met Thr Pro Phe Met Gly Ile Ser Pro Leu Pro Gly Gly Glu Arg 20 25 30

Phe Pro Tyr Pro Ser Phe His Trp Asp Pro Ile Arg Asp Pro Leu Arg
35 40 45

Asp Pro Tyr Xaa Glu Leu Asp Ile His Arg Arg Asp Pro Leu Gly Xaa 50 55 60

Asp Phe Leu Leu Arg Asn Asp Pro Xaa His Arg Leu Ser Thr Xaa Arg 65 70 75 80

Leu Xaa Xaa Ala Asp Arg Ser Phe Arg Asp Arg Glu Pro His Asp Tyr
85 90 95

Ser His His His His His His His Pro Leu Ser Val Asp Pro Arg

Arg Glu His Glu Arg Xaa Gly His Leu Asp Glu Arg Glu Arg Leu His
115 120 125

Met Leu Arg Glu Asp Tyr Glu His Thr Arg Leu His Ser Val His Pro 130 135 140

Ala Ser Leu Asp Gly His Leu Pro His Pro Ser Leu Ile Thr Pro Gly 145 150 155 160

Leu Pro Ser Met His Tyr Pro Arg Ile Ser Pro Thr Ala Gly Asn Gln
165 170 175

Asn Gly Leu Leu Asn Lys Thr Pro Pro Thr Ala Ala Leu Ser Ala Pro 180 185 190

Pro Pro Leu Ile Ser Thr Leu Gly Gly Arg Pro Val Ser Pro Arg Arg 195 200 205

Thr Thr Pro Leu Ser Ala Glu Ile Arg Glu Arg Pro Pro Ser His Thr 210 220

Leu Lys Asp Ile Glu Ala Arg 225 230

<210> 1337

<211> 155

<212> PRT

<213> Homo sapiens

<400> 1337

1385

Gly Val Glu Gly Leu Lys Asp Ala Gln Met Arg Asp Leu Leu Ser Pro 1 5 10 15

Pro Thr Asp Asn Arg Pro Gly Gln Met Asp Asn Arg Ser Lys Leu Arg 20 25 30

Asn Ile Val Glu Leu Arg Leu Ala Gly Leu Asp Ile Thr Asp Ala Ser 35 40 45

Leu Arg Leu Ile Ile Arg His Met Pro Leu Leu Ser Lys Leu His Leu 50 55 60

Ser Tyr Cys Asn His Val Thr Asp Gln Ser Ile Asn Leu Leu Thr Ala 65 70 75 80

Val Gly Thr Thr Arg Asp Ser Leu Thr Glu Ile Asn Leu Ser Asp 85 90 95

Cys Asn Lys Val Thr Asp Gln Cys Leu Ser Phe Phe Lys Arg Cys Gly
100 105 110

Asn Ile Cys His Ile Asp Leu Arg Tyr Cys Lys Gln Val Thr Lys Glu
115 120 125

Gly Cys Glu Gln Phe Ile Ala Glu Met Ser Val Ser Val Gln Phe Gly 130 135 140

Gln Val Glu Glu Lys Leu Leu Gln Lys Leu Ser 145 150 155

<210> 1338

<211> 328

<212> PRT

<213> Homo sapiens

<400> 1338

Asn Asn Ser Gly Val Met Pro Glu Met Pro Glu Asp Met Glu Gln Glu

1 5 10 15

Glu Val Asn Ile Pro Asn Arg Arg Val Leu Val Thr Gly Ala Thr Gly 20 25 30

Leu Leu Gly Arg Ala Val His Lys Glu Phe Gln Gln Asn Asn Trp His 35 40 45

Ala Val Gly Cys Gly Phe Arg Arg Ala Arg Pro Lys Phe Glu Gln Val 50 55 60

Asn Leu Leu Asp Ser Asn Ala Val His His Ile Ile His Asp Phe Gln

65					70					75					80
Pro	His	Val	Ile	Val 85	His	Cys	Ala	Ala	Glu 90	Arg	Arg	Pro	Asp	Val 95	Val
Glu	Asn	Gln	Pro 100	Asp	Ala	Ala	Ser	Gln 105	Leu	Asn	Val	Asp	Ala 110	Ser	Gly
Asn	Leu	Ala 115	Lys	Glu	Ala	Ala	Ala 120	Val	Gly	Ala	Phe	Leu 125	Ile	Tyr	Ile
Ser	Ser 130	Asp	Tyr	Val	Phe	Asp 135	Gly	Thr	Asn	Pro	Pro 140	Tyr	Arg	Glu	Glu
Asp 145	Ile	Pro	Ala	Pro	Leu 150	Asn	Leu	Tyr	Gly	Lys 155	Thr	Lys	Leu	Asp	Gly 160
Glu	Lys	Ala	Val	Leu 165	Glu	Asn	Asn	Leu	Gly 170	Ala	Ala	Val	Leu	Arg 175	Ile
Pro	Ile	Leu	Tyr 180	Gly	Glu	Val	Glu	Lys 185	Leu	Glu	Glu	Ser	Ala 190	Val	Thr
Val	Met	Phe 195	Asp	Lys	Val	Gln	Phe 200	Ser	Asn	Lys	Ser	Ala 205	Asn	Met	Asp
His	Trp 210	Gln	Gln	Arg	Phe	Pro 215	Thr	His	Val	Lys	Asp 220	Val	Ala	Thr	Val
Cys 225	Arg	Gln	Leu	Ala	Glu 230	Lys	Arg	Met	Leu	Asp 235	Pro	Ser	Ile	Lys	Gly 240
Thr	Phe	His	Trp	Ser 245	Gly	Asn	Glu	Gln	Met 250	Thr	Lys	Tyr	Glu	Met 255	Ala
Cys	Ala	Ile	Ala 260	Asp	Ala	Phe	Asn	Leu 265	Pro	Ser	Ser	His	Leu 270	Arg	Pro
Ile	Thr	Asp 275	Ser	Pro	Val	Leu	Gly 280	Ala	Gln	Arg	Pro	Arg 285	Asn	Ala	Gln
Leu	Asp 290	Cys	Ser	Lys	Leu	Glu 295	Thr	Leu	Gly	Ile	Gly 300	Gln	Arg	Thr	Pro
Phe 305	Arg	Ile	Gly	Ile	Lys 310	Glu	Ser	Leu	Trp	Pro 315	Phe	Leu	Ile	Asp	Lys 320
Arg	Trp	Arg	Gln	Thr 325	Val	Phe	His								

1387

<210> 1339

<211> 64

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1339

Leu Xaa His Pro Phe Ala Val Thr Ser Tyr Gly Lys Asn Leu Tyr Phe 1 5 10 15

Thr Asp Trp Lys Met Asn Ser Val Val Ala Leu Asp Leu Ala Ile Ser 20 25 30

Lys Glu Thr Asp Ala Phe Gln Pro His Lys Gln Thr Arg Leu Tyr Gly
35 40 45

Ile Thr Thr Ala Leu Ser Gln Cys Pro Gln Ala Ile Thr Thr Ala Gln 50 60

<210> 1340

<211> 155

<212> PRT

<213> Homo sapiens

<400> 1340

Arg Lys Met Ala Val Glu Ser Arg Val Thr Gln Glu Glu Ile Lys Lys 1 5 10 15

Glu Pro Glu Lys Pro Ile Asp Arg Glu Lys Thr Cys Pro Leu Leu Leu 20 25 30

Arg Val Phe Thr Thr Asn Asn Gly Arg His His Arg Met Asp Glu Phe $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ser Arg Gly Asn Val Pro Ser Ser Glu Leu Gln Ile Tyr Thr Trp Met 50 55 60

Asp Ala Thr Leu Lys Glu Leu Thr Ser Leu Val Lys Glu Val Tyr Pro 65 70 75 80

Glu Ala Arg Lys Lys Gly Thr His Phe Asn Phe Ala Ile Val Phe Thr

1388

85 90 95

Asp Val Lys Arg Pro Gly Tyr Arg Val Lys Glu Ile Gly Ser Thr Met 100 105 110

Ser Gly Arg Lys Gly Thr Asp Asp Ser Met Thr Leu Gln Ser Gln Lys 115 120 125

Phe Gln Ile Gly Asp Tyr Leu Asp Ile Ala Ile Thr Pro Pro Asn Arg 130 135 140

<210> 1341

<211> 72

<212> PRT

<213> Homo sapiens

<400> 1341

Ala Gln Leu Pro Ser Ser Phe Leu Arg His Arg Gly Val Phe Leu 1 5 10 15

Thr Pro Leu Leu Ala Met Ser Ser His Lys Thr Phe Arg Ile Lys Arg
20 25 30

Phe Leu Ala Lys Lys Gln Lys Gln Asn Arg Pro Ile Pro Gln Trp Ile 35 40 45

Arg Met Lys Thr Gly Asn Lys Ile Arg Tyr Asn Ser Lys Arg Arg His 50 60

Trp Arg Arg Thr Lys Leu Gly Leu 65 70

<210> 1342

<211> 270

<212> PRT

<213> Homo sapiens

<400> 1342

Leu Lys Val Ala Gln Thr Asp Gly Val Asn Val Asp Met His Leu Lys

1 10 15

Gln Ile Glu Ile Lys Lys Phe Lys Tyr Gly Ile Glu Glu His Gly Lys
20 25 30

1389

Val Lys Met Arg Gly Gly Leu Leu Arg Thr Tyr Ile Ile Ser Ile Leu 40 Phe Lys Ser Ile Phe Glu Val Ala Phe Leu Leu Ile Gln Trp Tyr Ile Tyr Gly Phe Ser Leu Ser Ala Val Tyr Thr Cys Lys Arg Asp Pro Cys 70 Pro His Gln Val Asp Cys Phe Leu Ser Arg Pro Thr Glu Lys Thr Ile 90 85 Phe Ile Ile Phe Met Leu Val Val Ser Leu Val Ser Leu Ala Leu Asn 105 Ile Ile Glu Leu Phe Tyr Val Phe Phe Lys Gly Val Lys Asp Arg Val 120 125 Lys Gly Lys Ser Asp Pro Tyr His Ala Thr Ser Gly Ala Leu Ser Pro 135 Ala Lys Asp Cys Gly Ser Gln Lys Tyr Ala Tyr Phe Asn Gly Cys Ser 150 155 Ser Pro Thr Ala Pro Leu Ser Pro Met Ser Pro Pro Gly Tyr Lys Leu 165 170 Val Thr Gly Asp Arg Asn Asn Ser Ser Cys Arg Asn Tyr Asn Lys Gln Ala Ser Glu Gln Asn Trp Ala Asn Tyr Ser Ala Glu Gln Asn Arg Met 200 Gly Gln Ala Gly Ser Thr Ile Ser Asn Ser His Ala Gln Pro Phe Asp 210 215 Phe Pro Asp Asp Asn Gln Asn Ser Lys Lys Leu Ala Ala Gly His Glu 235 225 230 Leu Gln Pro Leu Ala Ile Val Asp Gln Arg Pro Ser Ser Arg Ala Ser 245 250 Ser Arg Ala Ser Ser Arg Pro Arg Pro Asp Asp Leu Glu Ile

265

<210> 1343

<211> 94

<212> PRT

<213> Homo sapiens

1390

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<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1343
Gln Glu Leu Arg Ser Pro Ser Arg Ser Pro Ser Pro Pro Pro Lys Ser
                                     10
Pro Pro Trp Thr Thr Gly Gly Ser Leu Cys Glu Gln Leu Ala Phe Arg
            20
                                 25
Lys Pro Leu Ser Val Phe Lys Gln Lys Val Glu Gly Ala Thr Lys Gln
         35
                             40
Ala Ala Val Arg Ala Ser Xaa Cys Arg Pro Leu Pro Cys Ser Ser Ser
Ser Phe Ala Ser Ala Ser Ser Val Met Phe Cys Leu Glu Phe Tyr Leu
                    70
                                        75
Asp Phe Phe Ser Gly Tyr Phe Ser Val Phe Gln Pro Leu Leu
                 85
                                     90
<210> 1344
<211> 125
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1344
Tyr Ser Thr Arg Ala Leu Trp Lys Pro Asn His Val His Val Cys Val
                                    10
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<220>

1391

Cys Val Cys Ala Ser Phe Glu Pro Pro Ser Thr Ala Ala Ser Ser His $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$

Asp Thr Lys Leu Ieu Ile Ser Thr Phe Leu Trp Val Ala Gln Gly Leu 35 40 45

Ile Ala Ser His Ser Ile Thr Arg Ile Glu Ala Arg His Gly Gly Ala 50 55 60

Cys Leu Val Val Pro Ala Lys Leu Gly Arg Leu Glu Gly Arg Glu Gly 65 70 75 80

Ser Leu Trp Ser Pro Gly Arg Leu Glu Gly Trp Gln Trp Ser His Gly 85 90 95

Ser Gly Gly His Trp His Phe Gln Pro Gly Gly Gly Arg Val Glu Thr 100 105 110

Phe Val Leu Gln Lys Xaa Lys Lys Lys Xaa Xaa Gly Gly
115 120 125

<210> 1345

<211> 131

<212> PRT

<213> Homo sapiens

<400> 1345

Pro Arg Val Arg Arg Leu Arg Glu Asp Asp Arg Arg Gly Phe Leu Ser 1 5 10 15

Phe Arg Ala Asp Ser Ala His Ala Ser Met Val Asn Val Pro Lys Thr $20 \hspace{1cm} 25 \hspace{1cm} 30$

Arg Arg Thr Phe Cys Lys Lys Cys Gly Lys His Gln Pro His Lys Val 35 40 45

Thr Gln Tyr Lys Lys Gly Lys Asp Ser Leu Tyr Ala Gln Gly Lys Arg
50 55 60

Arg Tyr Asp Arg Lys Gln Ser Gly Tyr Gly Gly Gln Thr Lys Pro Ile 65 70 75 80

Phe Arg Lys Lys Ala Lys Thr Thr Lys Lys Ile Val Leu Arg Leu Glu 85 90 95

Cys Val Glu Pro Asn Cys Arg Ser Lys Arg Met Leu Ala Ile Lys Arg 100 105 110

Cys Lys His Phe Glu Leu Gly Gly Asp Lys Lys Arg Lys Gly Gln Val

1392

115 120 125

Ile Gln Phe 130

<210> 1346

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1346

Asn Lys Arg Asn Cys Lys Phe Pro Leu Leu Lys Ile Thr Lys Ile Thr 1 5 10 15

Glu Thr Lys Glu Glu Ile Arg Ile Trp Gly Ile Val Leu Asn Asn Leu 20 25 30

Val Val Lys Lys Asn Asn Cys Ala Cys Leu Asp Leu Asn Lys Pro Pro 35 40 45

Ser Lys Cys Glu Gly Ser Ser Asn Phe Ser Lys His Met Lys Val Leu 50 55 60

Ile His Phe Asp Lys Gly Pro Leu Lys Lys Ser 65 70 75

<210> 1347

<211> 413

<212> PRT

<213> Homo sapiens

<400> 1347

Gly Val Ala Arg Ala Gln Pro Val Pro Ala Val Leu Ser Trp Leu Leu
1 5 10 15

Ala Leu Leu Arg Cys Ala Ala Thr Met Leu Ser Leu Arg Val Pro Leu 20 25 30

Ala Pro Ile Thr Asp Pro Gln Gln Leu Gln Leu Ser Pro Leu Lys Gly
35 40 45

Leu Ser Leu Val Asp Lys Glu Asn Thr Pro Pro Ala Leu Ser Gly Thr 50 55 60

Arg Val Leu Ala Ser Lys Thr Ala Arg Arg Ile Phe Gln Glu Pro Thr 65 70 75 80

GIU	Pro	гÀг	THE	ьуs 85	Ala	ALd	АІА	PIO	90	vai	GIU	Asp	GIU	95	neu
Leu	Arg	Glu	Asn 100	Pro	Arg	Arg	Phe	Val 105	Ile	Phe	Pro	Ile	Glu 110	Tyr	His
Asp	Ile	Trp 115	Gln	Met	Tyr	Lys	Lys 120	Ala	Glu	Ala	Ser	Phe 125	Trp	Thr	Ala
Glu	Glu 130	Val	Asp	Leu	Ser	Lys 135	Asp	Ile	Gln	His	Trp 140	Glu	Ser	Leu	Lys
Pro 145	Glu	Glu	Arg	Tyr	Phe 150	Ile	Ser	His	Val	Leu 155	Ala	Phe	Phe	Ala	Ala 160
Ser	Asp	Gly	Ile	Val 165	Asn	Glu	Asn	Leu	Val 170	Glu	Arg	Phe	Ser	Gln 175	Glu
Val	Gln	Ile	Thr 180	Glu	Ala	Arg	Cys	Phe 185	Tyr	Gly	Phe	Gln	Ile 190	Ala	Met
Glu	Asn	Ile 195	His	Ser	Glu	Met	Tyr 200	Ser	Leu	Leu	Ile	Asp 205	Thr	Tyr	Ile
Lys	Asp 210	Pro	Lys	Glu	Arg	Glu 215	Phe	Leu	Phe	Asn	Ala 220	Ile	Glu	Thr	Met
Pro 225	Cys	Val	Lys	Lys	Lys 230	Ala	Asp	Trp	Ala	Leu 235	Arg	Trp	Ile	Gly	Asp 240
Lys	Glu	Ala	Thr	Tyr 245	Gly	Glu	Arg	Val	Val 250	Ala	Phe	Ala	Ala	Val 255	Glu
Gly	Ile	Phe	Phe 260	Ser	Gly	Ser	Phe	Ala 265	Ser	Ile	Phe	Trp	Leu 270	Lys	Lys
Arg	Gly	Leu 275	Met	Pro	Gly	Leu	Thr 280	Phe	Ser	Asn	Glu	Leu 285	Ile	Ser	Arg
Asp	Glu 290	Gly	Leu	His	Cys	Asp 295	Phe	Ala	Cys	Leu	Met 300	Phe	Lys	His	Leu
Val 305	His	Lys	Pro	Ser	Glu 310	Glu	Arg	Val	Arg	Glu 315	Ile	Ile	Ile	Asn	Ala 320
Val	Arg	Ile	Glu	Gln 325	Glu	Phe	Leu	Thr	Glu 330	Ala	Leu	Pro	Val	Lys 335	Leu
Ile	Gly	Met	Asn 340	Cys	Thr	Leu	Met	Lys 345	Gln	Tyr	Ile	Glu	Phe 350	Val	Ala

1394

Asp Arg Leu Met Leu Glu Leu Gly Phe Ser Lys Val Phe Arg Val Glu 355 360 365

Asn Pro Phe Asp Phe Met Glu Asn Ile Ser Leu Glu Gly Lys Thr Asn 370 375 380

Phe Phe Glu Lys Arg Val Gly Glu Tyr Gln Arg Met Gly Val Met Ser 385 390 395 400

Ser Pro Thr Glu Asn Ser Phe Thr Leu Asp Ala Asp Phe 405 410

<210> 1348

<211> 243

<212> PRT

<213> Homo sapiens

<400> 1348

Thr Gly Asn Lys Met Gln Asp Pro Asn Ala Asp Thr Glu Trp Asn Asp 1 5 10 15

Ile Leu Arg Lys Lys Gly Ile Leu Pro Pro Lys Glu Ser Leu Lys Glu 20 25 30

Leu Glu Glu Glu Glu Glu Glu Gln Arg Ile Leu Gln Gln Ser Val

35 40 45

Val Lys Thr Tyr Glu Asp Met Thr Leu Glu Glu Leu Glu Asp His Glu
50 55 60

Asp Glu Phe Asn Glu Glu Asp Glu Arg Ala Ile Glu Met Tyr Arg Arg 65 70 75 80

Arg Arg Leu Ala Glu Trp Lys Ala Thr Lys Leu Lys Asn Lys Phe Gly 85 90 95

Glu Val Leu Glu Ile Ser Gly Lys Asp Tyr Val Glu Glu Val Thr Lys 100 105 110

Ala Gly Glu Gly Leu Trp Val Ile Leu His Leu Tyr Lys Gln Gly Ile 115 120 125

Pro Leu Cys Ala Leu Ile Asn Gln His Leu Ser Gly Leu Ala Arg Lys 130 135 140

Phe Pro Asp Val Lys Phe Ile Lys Ala Ile Ser Thr Thr Cys Ile Pro 145 150 155 160

Asn Tyr Pro Asp Arg Asn Leu Pro Thr Ile Phe Val Tyr Leu Glu Gly

1395

165 175 170 Asp Ile Lys Ala Gln Phe Ile Gly Pro Leu Val Phe Gly Gly Met Asn 180 185 Leu Thr Arg Asp Glu Leu Glu Trp Lys Leu Ser Glu Ser Gly Ala Ile 200 Met Thr Asp Leu Glu Glu Asn Pro Lys Lys Pro Ile Glu Asp Val Leu Leu Ser Ser Val Arg Arg Ser Val Leu Met Lys Arg Asp Ser Asp Ser 225 230 235 Glu Gly Asp <210> 1349 <211> 326 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (137) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (142) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1349 Arg Met Ala Thr Pro Leu Pro Pro Pro Ser Pro Arg His Leu Arg Leu 1 5 Leu Arg Leu Leu Ser Gly Leu Val Leu Gly Ala Ala Leu Arg Gly 20 Ala Ala Ala Gly His Pro Asp Val Ala Ala Cys Pro Gly Ser Leu Asp 40 Cys Ala Leu Lys Arg Arg Ala Arg Cys Pro Pro Gly Ala His Ala Cys 55 Gly Pro Cys Leu Gln Pro Phe Gln Glu Asp Gln Gln Gly Leu Cys Val 65 70

Pro Arg Met Arg Arg Pro Pro Gly Gly Gly Arg Pro Gln Pro Arg Leu

1396

				85					90					95	
Glu	Asp	Glu	Ile 100	Asp	Phe	Leu	Ala	Gln 105	Glu	Leu	Ala	Arg	Lys 110	Glu	Ser
Gly	His	Ser 115	Thr	Pro	Pro	Leu	Pro 120	Lys	Asp	Arg	Gln	Arg 125	Leu	Pro	Glu
Pro	Ala 130	Thr	Leu	Gly	Phe	Ser 135	Ala	Xaa	Gly	Gln	Gly 140	Leu	Xaa	Leu	Gly
Leu 145	Pro	Ser	Thr	Pro	Gly 150	Thr	Pro	Thr	Pro	Thr 155	Pro	His	Thr	Ser	Leu 160
Gly	Ser	Pro	Val	Ser 165	Ser	Asp	Pro	Val	His 170	Met	Ser	Pro	Leu	Glu 175	Pro
Arg	Gly	Gly	Gln 180	Gly	Asp	Gly	Leu	Ala 185	Leu	Val	Leu	Ile	Leu 190	Ala	Phe
Cys	Val	Ala 195	Gly	Ala	Ala	Ala	Leu 200	Ser	Val	Ala	Ser	Leu 205	Cys	Trp	Cys
Arg	Leu 210	Gln	Arg	Glu	Ile	Arg 215	Leu	Thr	Gln	Lys	Ala 220	Asp	Tyr	Ala	Thr
Ala 225	Lys	Ala	Pro	Gly	Ser 230	Pro	Ala	Ala	Pro	Arg 235	Ile	Ser	Pro	Gly	Asp 240
Gln	Arg	Leu	Ala	Gln 245	Ser	Ala	Glu	Met	Туг 250	His	Tyr	Gln	His	Gln 255	Arg
Gln	Gln	Met	Leu 260	Cys	Leu	Glu	Arg	His 265	Lys	Glu	Pro	Pro	Lys 270	Glu	Leu
Asp	Thr	Ala 275	Ser	Ser	Asp	Glu	Glu 280	Asn	Glu	Asp	Gly	Asp 285	Phe	Thr	Val
Tyr	Glu 290	Cys	Pro	Gly	Leu	Ala 295	Pro	Thr	Gly	Glu	Met 300	Glu	Val	Arg	Asn
Pro 305	Leu	Phe	Asp	His	Ala 310	Ala	Leu	Ser	Ala	Pro 315	Leu	Pro	Ala	Pro	Ser 320
Ser	Pro	Pro	Ala	Leu 325	Pro										

<210> 1350 <211> 62

1397

<212> PRT

<213> Homo sapiens

<400> 1350

Val Lys Ser Asp Thr Pro Pro Cys Val Ser Lys Asn Leu Val Pro Pro 1 5 10 15

Leu His Thr Ser Leu Thr Leu Asn Ile Phe His Trp Ile Leu Asp Arg
20 25 30

Ala Lys Gly Arg Thr Gly Ala Ser Gly Gly Pro Trp Leu Phe Lys Ser 35 40 45

Trp Ile Ile Cys Asp Ser Asn His Lys Phe Leu Ala Asn Phe
50 55 60

<210> 1351

<211> 312

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (299)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1351

Glu Pro Arg Pro Gly Cys Gly Asn Lys Met Ala Gly Lys Lys Asn Val 1 5 10 15

Leu Ser Ser Leu Ala Val Tyr Ala Glu Asp Ser Glu Pro Glu Ser Asp 20 25 30

Gly Glu Ala Gly Ile Glu Ala Val Gly Ser Ala Ala Glu Glu Lys Gly 40 45

Gly Leu Val Ser Asp Ala Tyr Gly Glu Asp Asp Phe Ser Arg Leu Gly 50 60

Gly Asp Glu Asp Gly Tyr Glu Glu Glu Glu Asp Glu Asn Ser Arg Gln 65 70 75 80

Ser Glu Asp Asp Ser Glu Thr Glu Lys Pro Glu Ala Asp Asp Pro 85 90 95

Lys Asp Asn Thr Glu Ala Glu Lys Arg Asp Pro Gln Glu Leu Val Ala 100 105 110

Ser Phe Ser Glu Arg Val Arg Asn Met Ser Pro Asp Glu Ile Lys Ile

1398

115 120 125 Pro Pro Glu Pro Pro Gly Arg Cys Ser Asn His Leu Gln Asp Lys Ile 135 Gln Lys Leu Tyr Glu Arg Lys Ile Lys Glu Gly Met Asp Met Asn Tyr 150 Ile Ile Gln Arg Lys Lys Glu Phe Arg Asn Pro Ser Ile Tyr Glu Lys 165 170 Leu Ile Gln Phe Cys Ala Ile Asp Glu Leu Gly Thr Asn Tyr Pro Lys 180 185 Asp Met Phe Asp Pro His Gly Trp Ser Glu Asp Ser Tyr Tyr Glu Ala 200 Leu Ala Lys Ala Gln Lys Ile Glu Met Asp Lys Leu Glu Lys Ala Lys 215 Lys Glu Arg Thr Lys Ile Glu Phe Val Thr Gly Thr Lys Lys Gly Thr 225 230 235 Thr Thr Asn Ala Thr Ser Thr Thr Thr Thr Ala Ser Thr Ala Val 245 250 Ala Asp Ala Gln Lys Arg Lys Ser Lys Trp Asp Ser Ala Ile Pro Val 260 265 Thr Thr Ile Ser Pro Ala His His Pro His His Ser His Pro Ala 275 Ser Cys Cys His Gly His His Gln Arg Gln Xaa Ser Lys Asp His Arg 295 300 His Leu Cys Cys Gly Ala Pro Leu 305 310 <210> 1352 <211> 259

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1352

1399

Leu 1	Leu	Asp	Ser	Leu 5	Lys	Xaa	Asp	Tyr	Ala 10	Gly	Lys	Pro	Gln	Pro 15	Pro
Ile	Lys	Ser	Glu 20	Arg	Arg	Asn	Pro	Pro 25	Ser	Tyr	Ala	Met	Ala 30	Gly	Lys
Lys	Val	Leu 35	Ile	Val	Tyr	Ala	His 40	Gln	Glu	Pro	Lys	Ser 45	Phe	Asn	Gly
Ser	Leu 50	Lys	Asn	Val	Ala	Val 55	Asp	Glu	Leu	Ser	Arg 60	Gln	Gly	Cys	Thi
Val 65	Thr	Val	Ser	Asp	Leu 70	Tyr	Ala	Met	Asn	Phe 75	Glu	Pro	Arg	Ala	Thi
Asp	Lys	Asp	Ile	Thr 85	Gly	Thr	Leu	Ser	Asn 90	Pro	Glu	Val	Phe	Asn 95	Туг
Gly	Val	Glu	Thr 100	His	Glu	Ala	Tyr	Lys 105	Gln	Arg	Ser	Leu	Ala 110	Ser	Asp
Ile	Thr	Asp 115	Glu	Gln	Lys	Lys	Val 120	Arg	Glu	Ala	Asp	Leu 125	Val	Ile	Phe
Gln	Phe 130	Pro	Leu	Tyr	Trp	Phe 135	Ser	Val	Pro	Ala	Ile 140	Leu	Lys	Gly	Tr
Met 145	Asp	Arg	Val	Leu	Cys 150	Gln	Gly	Phe	Ala	Phe 155	Asp	Ile	Pro	Gly	Phe 160
Tyr	Asp	Ser	Gly	Leu 165	Leu	Gln	Gly	Lys	Leu 170	Ala	Leu	Leu	Ser	Val 175	Thi
Thr	Gly	Gly	Thr 180	Ala	Glu	Met	Tyr	Thr 185	Lys	Thr	Gly	Val	Asn 190	Gly	Asp
Ser	Arg	Туг 195	Phe	Leu	Trp	Pro	Leu 200	Gln	His	Gly	Thr	Leu 205	His	Phe	Суз
Gly	Phe 210	Lys	Val	Leu	Ala	Pro 215	Gln	Ile	Ser	Phe	Ala 220	Pro	Glu	Ile	Ala
Ser 225	Glu	Glu	Glu	Arg	Lys 230	Gly	Met	Val	Ala	Ala 235	Trp	Ser	Gln	Arg	Let 240
Gln	Thr	Ile	Trp	Lys 245	Glu	Glu	Pro	Ile	Pro 250	Cys	Thr	Ala	His	Trp 255	His

Phe Gly Gln

1400

<210> 1353

<211> 72

<212> PRT

<213> Homo sapiens

<400> 1353

Asp Leu Ala Ser Glu Glu His Phe Phe Ser Val Lys Phe Leu Tyr Leu 1 5 10 15

Lys Ile Gln Lys Tyr Phe Arg Ile Leu Leu Ile Leu Ser Pro Val Phe 20 25 30

Thr Ser Phe Trp Lys Thr Cys Ile Thr Met Ser Leu Glu Lys Gly Gln 35 40 45

Arg Lys Ala Phe His Val Lys Ile Arg Ser Leu Ala Ile Ser Asn Pro 50 55 60

Val Leu Phe Ser Leu His Phe Phe 65 70

<210> 1354

<211> 301

<212> PRT

<213> Homo sapiens

<400> 1354

Lys Arg Arg Arg Leu Glu Gln Arg Gln Gln Pro Asp Glu Gln Arg
1 5 10 15

Arg Arg Ser Gly Ala Met Val Lys Met Ala Ala Ala Gly Gly Gly 20 25 30

Gly Gly Gly Arg Tyr Tyr Gly Gly Gly Ser Glu Gly Gly Arg Ala Pro 35 40 45

Lys Arg Leu Lys Thr Asp Asn Ala Gly Asp Gln His Gly Gly Gly 50 55 60

Gly Gly Gly Gly Ala Gly Ala Ala Gly Gly Gly Gly Gly Glu
65 70 75 80

Asn Tyr Asp Asp Pro His Lys Thr Pro Ala Ser Pro Val Val His Ile $85 \hspace{1cm} 90 \hspace{1cm} 95$

Arg Gly Leu Ile Asp Gly Val Val Glu Ala Asp Leu Val Glu Ala Leu 100 105 110

1401

Gln Glu Phe Gly Pro Ile Ser Tyr Val Val Val Met Pro Lys Lys Arg 120 115 Gln Ala Leu Val Glu Phe Glu Asp Val Leu Gly Ala Cys Asn Ala Val 135 Asn Tyr Ala Ala Asp Asn Gln Ile Tyr Ile Ala Gly His Pro Ala Phe 150 155 Val Asn Tyr Ser Thr Ser Gln Lys Ile Ser Arg Pro Gly Asp Ser Asp 165 170 Asp Ser Arg Ser Val Asn Ser Val Leu Leu Phe Thr Ile Leu Asn Pro 180 185 Ile Tyr Ser Ile Thr Thr Asp Val Leu Tyr Thr Ile Cys Asn Pro Cys 200 Gly Pro Val Gln Arg Ile Val Ile Phe Arg Lys Asn Gly Val Gln Ala 215 Met Val Glu Phe Asp Ser Val Gln Ser Ala Gln Arg Ala Lys Ala Ser 225 230 235 Leu Asn Gly Ala Asp Ile Tyr Ser Gly Cys Cys Thr Leu Lys Ile Glu 245 250 Tyr Ala Lys Pro Thr Arg Leu Asn Val Phe Lys Asn Asp Gln Asp Thr Trp Asp Tyr Thr Asn Pro Asn Leu Ser Gly Gln Gly Asn Leu Asp Asp 275 His Phe Val Leu Asn Ile Pro Ala Leu Leu Ser Leu Asp

<210> 1355

290

<211> 466

<212> PRT

<213> Homo sapiens

<400> 1355

Asn Thr Val Met Gly Arg Lys Lys Lys Gln Leu Lys Pro Trp Cys 1 5 10 15

300

295

Trp Tyr Cys Asn Arg Asp Phe Asp Asp Glu Lys Ile Leu Ile Gln His
20 25 30

GIII	гур	35	гур	птэ	Pne	гуѕ	40	птъ	116	cys	urs	45	гур	Den	TY.
Thr	Gly 50	Pro	Gly	Leu	Ala	Ile 55	His	Cys	Met	Gln	Val 60	His	Lys	Glu	Th
Ile 65	Asp	Ala	Val	Pro	Asn 70	Ala	Ile	Pro	Gly	Arg 75	Thr	Asp	Ile	Glu	Let 80
Glu	Ile	Tyr	Gly	Met 85	Glu	Gly	Ile	Pro	Glu 90	Lys	Asp	Met	Asp	Glu 95	Arg
Arg	Arg	Leu	Leu 100	Glu	Gln	Lys	Thr	Gln 105	Glu	Ser	Gln	Lys	Lys 110	Lys	Gli
Gln	Asp	Asp 115	Ser	Asp	Glu	Tyr	Asp 120	Asp	Asp	Asp	Ser	Ala 125	Ala	Ser	Th
Ser	Phe 130	Gln	Pro	Gln	Pro	Val 135	Gln	Pro	Gln	Gln	Gly 140	Tyr	Ile	Pro	Pro
Met 145	Ala	Gln	Pro	Gly	Leu 150	Pro	Pro	Val	Pro	Gly 155	Ala	Pro	Gly	Met	Pro 160
Pro	Gly	Ile	Pro	Pro 165	Leu	Met	Pro	Gly	Val 170	Pro	Pro	Leu	Met	Pro 175	Gl
Met	Pro	Pro	Val 180	Met	Pro	Gly	Met	Pro 185	Pro	Gly	Leu	His	His 190	Gln	Arg
Lys	Tyr	Thr 195	Gln	Ser	Phe	Cys	Gly 200	Glu	Asn	Ile	Met	Met 205	Pro	Met	Gly
Gly	Met 210	Met	Pro	Pro	Gly	Pro 215	Gly	Ile	Pro	Pro	Leu 220	Met	Pro	Gly	Met
Pro 225	Pro	Gly	Met	Pro	Pro 230	Pro	Val	Pro	Arg	Pro 235	Gly	Ile	Pro	Pro	Met 240
Thr	Gln	Ala	Gln	Ala 245	Val	Ser	Ala	Pro	Gly 250	Ile	Leu	Asn	Arg	Pro 255	Pro
Ala	Pro	Thr	Ala 260	Thr	Val	Pro	Ala	Pro 265	Gln	Pro	Pro	Val	Thr 270	Lys	Pro
Leu	Phe	Pro 275	Ser	Ala	Gly	Gln	Ala 280	Gln	Ala	Ala	Val	Gln 285	Gly	Pro	Val
Gly	Thr 290	Asp	Phe	Lys	Pro	Leu 295	Asn	Ser	Thr	Pro	Ala 300	Thr	Thr	Thr	Glu

Pro Pro Lys Pro Thr Phe Pro Ala Tyr Thr Gln Ser Thr Ala Ser Thr 310 315 Thr Ser Thr Thr Asn Ser Thr Ala Ala Lys Pro Ala Ala Ser Ile Thr 330 325 Ser Lys Pro Ala Thr Leu Thr Thr Ser Ala Thr Ser Lys Leu Ile 350 345 340 His Pro Asp Glu Asp Ile Ser Leu Glu Glu Arg Arg Ala Gln Leu Pro 360 Lys Tyr Gln Arg Asn Leu Pro Arg Pro Gly Gln Ala Pro Ile Gly Asn 375 Pro Pro Val Gly Pro Ile Gly Gly Met Met Pro Pro Gln Pro Gly Ile 385 390 395 Pro Gln Gln Gly Met Arg Pro Pro Met Pro Pro His Gly Gln Tyr 405 410 Gly Gly His His Gln Gly Met Pro Gly Tyr Leu Pro Gly Ala Met Pro 425 Pro Tyr Gly Gln Gly Pro Pro Met Val Pro Pro Tyr Gln Gly Gly Pro 435 Pro Arg Pro Pro Met Gly Met Arg Pro Pro Val Met Ser Gln Gly Gly 455 460 Arg Tyr 465 <210> 1356

<211> 85

<212> PRT

<213> Homo sapiens

<400> 1356

Leu Ser Asp Asp Gln Ser Leu Leu Ile Ile Leu Leu Lys Gly Leu

Leu Thr Asn Leu Ser Phe Thr Pro Cys Gly Pro Cys Tyr Trp Tyr Thr 20 25

Gln Tyr Val Leu Thr Glu Asp Met Asp Phe Ile Cys Ser Ser Ala Gly 40

Ile Gly Lys Leu Asp Leu Phe Ser Met Ile Gln Asn Ser Pro Ile Arg

1404

50 55 60

Arg Leu Glu Lys Glu Glu Leu Tyr Ser Ser Leu Cys Tyr Phe Leu Leu 65 70 75 80

Pro Phe Leu Phe Leu

85

<210> 1357

<211> 580

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (526)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1357

Asp Ser Xaa Thr Phe Asp Asp Leu Ala Val Asp Phe Thr Pro Glu Glu
1 5 10 15

Trp Thr Leu Leu Asp Pro Thr Gln Arg Asn Leu Tyr Arg Asp Val Met 20 25 30

Leu Glu Asn Tyr Lys Asn Leu Ala Thr Val Gly Tyr Gln Leu Phe Lys $35 \hspace{1cm} 40 \hspace{1cm} 45$

Pro Ser Leu Ile Ser Trp Leu Glu Glu Glu Ser Arg Thr Val Gln
50 55 60

Arg Gly Asp Phe Gln Ala Ser Glu Trp Lys Val Gln Leu Lys Thr Lys 65 70 75 80

Glu Leu Ala Leu Gln Gln Asp Val Leu Gly Glu Pro Thr Ser Ser Gly 85 90 95

Ile Gln Met Ile Gly Ser His Asn Gly Gly Glu Val Ser Asp Val Lys
100 105 110

Gln Cys Gly Asp Val Ser Ser Glu His Ser Cys Leu Lys Thr His Val

Arg Thr Gln Asn Ser Glu Asn Thr Phe Glu Cys Tyr Leu Tyr Gly Val

135 130 140 Asp Phe Leu Thr Leu His Lys Lys Thr Ser Thr Gly Glu Gln Arg Ser 150 Val Phe Ser Gln Cys Gly Lys Ala Phe Ser Leu Asn Pro Asp Val Val 170 165 Cys Gln Arg Thr Cys Thr Gly Glu Lys Ala Phe Asp Cys Ser Asp Ser 185 Gly Lys Ser Phe Ile Asn His Ser His Leu Gln Gly His Leu Arg Thr 200 His Asn Gly Glu Ser Leu His Glu Trp Lys Glu Cys Gly Arg Gly Phe Ile His Ser Thr Asp Leu Ala Val Arg Ile Gln Thr His Arg Ser Glu 225 230 235 Lys Pro Tyr Lys Cys Lys Glu Cys Gly Lys Gly Phe Arg Tyr Ser Ala 245 250 Tyr Leu Asn Ile His Met Gly Thr His Thr Gly Asp Asn Pro Tyr Glu 265 Cys Lys Glu Cys Gly Lys Ala Phe Thr Arg Ser Cys Gln Leu Thr Gln His Arg Lys Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Lys Asp Cys 295 Gly Arg Ala Phe Thr Val Ser Ser Cys Leu Ser Gln His Met Lys Ile 315 310 His Val Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Ile Ala Phe 325 330 Thr Arg Ser Ser Gln Leu Thr Glu His Leu Lys Thr His Thr Ala Lys Asp Pro Phe Glu Cys Lys Ile Cys Gly Lys Ser Phe Arg Asn Ser Ser 360 Cys Leu Ser Asp His Phe Arg Ile His Thr Gly Ile Lys Pro Tyr Lys 375 370 Cys Lys Asp Cys Gly Lys Ala Phe Thr Gln Asn Ser Asp Leu Thr Lys 395 385 390 His Ala Arg Thr His Ser Gly Glu Arg Pro Tyr Glu Cys Lys Glu Cys

1406

415

410

405

<222> (445)

Gly Lys Ala Phe Ala Arg Ser Ser Arg Leu Ser Glu His Thr Arg Thr 425 His Thr Gly Glu Lys Pro Phe Glu Cys Val Lys Cys Gly Lys Ala Phe 440 Ala Ile Ser Ser Asn Leu Ser Gly His Leu Arg Ile His Thr Gly Glu 455 Lys Pro Phe Glu Cys Leu Glu Cys Gly Lys Ala Phe Thr His Ser Ser 475 465 470 Ser Leu Asn Asn His Met Arg Thr His Ser Ala Lys Lys Pro Phe Thr 490 Cys Met Glu Cys Gly Lys Ala Phe Lys Phe Pro Thr Cys Val Asn Leu 505 His Met Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Xaa Gln Cys 515 520 Gly Lys Ser Phe Ser Tyr Ser Asn Ser Phe Gln Leu His Glu Arg Thr 535 His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ala Phe 545 550 555 Ser Ser Ser Ser Phe Arg Asn His Glu Arg Arg His Ala Asp Glu 565 570 Arg Leu Ser Ala 580 <210> 1358 <211> 612 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (134) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

<223> Xaa equals any of the naturally occurring L-amino acids

< 40	0> 1	358													
Glu 1	Val	Pro	Glu	Ala 5	His	Arg	Ala	Ser	Pro 10	Arg	Glu	Gly	Thr	Ser 15	Gly
Gly	Glu	Arg	Leu 20	Gln	Asp	Leu	Val	Lys 25	Ser	Lys	Met	Ser	Glu 30	Thr	Sei
Arg	Thr	Ala 35	Phe	Gly	Gly	Arg	Arg 40	Ala	Val	Pro	Pro	Asn 45	Asn	Ser	Ası
Ala	Ala 50	Glu	Asp	Asp	Leu	Pro 55	Thr	Val	Glu	Leu	Gln 60	Gly	Val	Val	Pro
Arg 65	Gly	Val	Asn	Leu	Gln 70	Asp	Asp	Ala	Val	туr 75	Leu	Asp	Asn	Glu	Lys 80
Glu	Arg	Glu	Glu	Tyr 85	Val	Leu	Asn	Asp	Ile 90	Gly	Val	Ile	Phe	Туг 95	Gly
Glu	Val	Asn	Asp 100	Ile	Lys	Thr	Arg	Ser 105	Trp	Ser	Tyr	Gly	Gln 110	Phe	Glu
Asp	Gly	Ile 115	Leu	Asp	Thr	Cys	Leu 120	Tyr	Val	Met	Asp	Arg 125	Ala	Gln	Met
Asp	Leu 130	Ser	Gly	Arg	Xaa	Asn 135	Pro	Ile	Lys	Val	Ser 140	Arg	Val	Gly	Sei
Ala 145	Met	Val	Asn	Ala	Lys 150	Asp	Asp	Glu	Gly	Val 155	Leu	Val	Gly	Ser	Trp 160
Asp	Asn	Ile	Tyr	Ala 165	Tyr	Gly	Val	Pro	Pro 170	Ser	Ala	Trp	Thr	Gly 175	Sei
Val	Asp	Ile	Leu 180	Leu	Glu	Tyr	Arg	Ser 185	Ser	Glu	Asn	Pro	Val 190	Arg	Ту
Gly	Gln	Cys 195	Trp	Val	Phe	Ala	Gly 200	Val	Phe	Asn	Thr	Phe 205	Leu	Arg	Cys
Leu	Gly 210	Ile	Pro	Ala	Arg	Ile 215	Val	Thr	Asn	Tyr	Phe 220	Ser	Ala	His	Asp
Asn 225	Asp	Ala	Asn	Leu	Gln 230	Met	Asp	Ile	Phe	Leu 235	Glu	Glu	Asp	Gly	Ası 240
Val	Asn	Ser	Lys	Leu 245	Thr	Lys	Asp	Ser	Val 250	Trp	Asn	Tyr	His	Cys 255	Tr
Acn	Glu	Δla	Trn	Mot	Thr.	Ara	Pro	Asn	T.e.u	Pro	Va l	Glv	Dhe	Glv	Gls

260 265 270 Trp Gln Ala Val Asp Ser Thr Pro Gln Glu Asn Ser Asp Gly Met Tyr 280 Arg Cys Gly Pro Ala Ser Val Gln Ala Ile Lys His Gly His Val Cys 295 Phe Gln Phe Asp Ala Pro Phe Val Phe Ala Glu Val Asn Ser Asp Leu 310 315 Ile Tyr Ile Thr Ala Lys Lys Asp Gly Thr His Val Val Glu Asn Val 330 325 Asp Ala Thr His Ile Gly Lys Leu Ile Val Thr Lys Gln Ile Gly Gly Asp Gly Met Met Asp Ile Thr Asp Thr Tyr Lys Phe Gln Glu Gly Gln 360 Glu Glu Glu Arg Leu Ala Leu Glu Thr Ala Leu Met Tyr Gly Ala Lys 370 375 Lys Pro Leu Asn Thr Glu Gly Val Met Lys Ser Arg Ser Asn Val Asp 390 395 Met Asp Phe Glu Val Glu Asn Ala Val Leu Gly Lys Asp Phe Lys Leu 405 Ser Ile Thr Phe Arg Asn Asn Ser His Asn Arg Tyr Thr Ile Thr Ala 420 Tyr Leu Ser Ala Asn Ile Thr Phe Tyr Thr Gly Val Xaa Lys Ala Glu 440 Phe Lys Lys Glu Thr Phe Asp Val Thr Leu Glu Pro Leu Ser Phe Lys 450 455 Lys Glu Ala Val Leu Ile Gln Ala Gly Glu Tyr Met Gly Gln Leu Leu 465 470 475 Glu Gln Ala Ser Leu His Phe Phe Val Thr Ala Arg Ile Asn Glu Thr Arg Asp Val Leu Ala Lys Gln Lys Ser Thr Val Leu Thr Ile Pro Glu 500 Ile Ile Ile Lys Val Arg Gly Thr Gln Val Val Gly Ser Asp Met Thr 515 Val Thr Val Glu Phe Thr Asn Pro Leu Lys Glu Thr Leu Arg Asn Val

1409

530 535 540 Trp Val His Leu Asp Gly Pro Gly Val Thr Arg Pro Met Lys Lys Met 545 Phe Arg Glu Ile Arg Pro Asn Ser Thr Val Gln Trp Glu Glu Val Cys 570 565 Arg Pro Trp Val Ser Gly His Arg Lys Leu Ile Ala Ser Met Ser Ser 580 585 Asp Ser Leu Arg His Val Tyr Gly Glu Leu Asp Val Gln Ile Gln Arg 595 600 Arg Pro Ser Met 610 <210> 1359 <211> 56 <212> PRT <213> Homo sapiens <400> 1359 Leu Ser Cys Ile Val Leu Leu Arg Gln Ser Ser Val Lys Leu Tyr Gln 10 Leu Arg Leu Val Ser Ser Asp Phe His Trp Gly Ile Arg Val Leu Ala 25 Gly Leu Asn Leu Leu Val Gly Ser Val Phe Leu Met Asn Lys Ser His Ser Thr Glu Leu Gln Val Ile 50 55 <210> 1360 <211> 415 <212> PRT <213> Homo sapiens <220> <221> SITE

<223> Xaa equals any of the naturally occurring L-amino acids

<222> (368)

<220> <221> SITE

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<220>
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<222> (409)
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WO 00/55350

1411

PCT/US00/05882

<22	3> Xa	aa e	qual:	s any	y of	the	nati	ıral	ly o	ccur	ring	L-aı	mino	acio	ds
	0> 1: Gly		Gly	Glu 5	Lys	Met	Ala	Asp	Asp 10	Pro	Ser	Ala	Ala	Asp 15	Arg
Asn	Val	Glu	Ile 20	Trp	Lys	Ile	Lys	Lys 25	Leu	Ile	Lys	Ser	Leu 30	Glu	Ala
Ala	Arg	Gly 35	Asn	Gly	Thr	Ser	Met 40	Ile	Ser	Leu	Ile	Ile 45	Pro	Pro	Lys
Asp	Gln 50	Ile	Ser	Arg	Val	Ala 55	Lys	Met	Leu	Ala	Asp 60	Glu	Phe	Gly	Thr
Ala 65	Ser	Asn	Ile	Lys	Ser 70	Arg	Val	Asn	Arg	Leu 75	Ser	Val	Leu	Gly	Ala 80
Ile	Thr	Ser	Val	Gln 85	Gln	Arg	Leu	Lys	Leu 90	Tyr	Asn	Lys	Val	Pro 95	Pro
Asn	Gly	Leu	Val 100	Val	Tyr	Cys	Gly	Thr 105	Ile	Val	Thr	Glu	Glu 110	Gly	Lys
Glu	Lys	Lys 115	Val	Asn	Ile	Asp	Phe 120	Glu	Pro	Phe	Lys	Pro 125	Ile	Asn	Thr
Ser	Leu 130	Tyr	Leu	Cys	Asp	Asn 135	Lys	Phe	His	Thr	Glu 140	Ala	Leu	Thr	Ala
Leu 145	Leu	Ser	Asp	Asp	Ser 150	Lys	Phe	Gly	Phe	Ile 155	Val	Ile	Asp	Gly	Ser 160
Gly	Ala	Leu	Phe	Gly 165	Thr	Leu	Gln	Gly	Asn 170	Thr	Arg	Glu	Val	Leu 175	His
Lys	Phe	Thr	Val 180	Asp	Leu	Pro	Lys	Lys 185	His	Gly	Arg	Gly	Gly 190	Gln	Ser
Ala	Leu	Arg 195	Phe	Ala	Arg	Leu	Arg 200	Met	Glu	Lys	Arg	His 205	Asn	Tyr	Val
Arg	Lys 210	Val	Ala	Glu	Thr	Ala 215	Val	Gln	Leu	Phe	Ile 220	Ser	Gly	Asp	Lys
Val 225	Asn	Val	Ala	Gly	Leu 230	Val	Leu	Ala	Gly	Ser 235	Ala	Asp	Phe	Lys	Thr 240
Glu	Leu	Ser	Gln	Ser 245	Asp	Met	Phe	Asp	Gln 250	Arg	Leu	Gln	Ser	Lys 255	Val

Leu Lys Leu Val Asp Ile Ser Tyr Gly Glu Asn Gly Phe Asn Gln 265 Ala Ile Glu Leu Ser Thr Glu Val Leu Ser Asn Val Lys Phe Ile Gln 280 Glu Lys Lys Leu Ile Gly Arg Tyr Phe Asp Glu Ile Ser Gln Asp Thr 290 295 Gly Lys Tyr Cys Phe Gly Val Glu Asp Thr Leu Lys Ala Leu Glu Met Gly Ala Val Glu Ile Leu Ile Val Tyr Glu Asn Leu Asp Ile Met Arg 325 330 Tyr Val Leu His Cys Gln Gly Thr Glu Glu Lys Ile Leu Tyr Leu 340 345 350 Thr Pro Glu Gln Glu Lys Asp Lys Ser His Phe Thr Asp Lys Glu Xaa 355 360 Arg Thr Gly Thr Met Xaa Leu Ser Arg Ala Xaa Pro Xaa Leu Glu Xaa

Ile Asn Ser Xaa Xaa Arg Gly Gln Xaa Trp Lys Arg Ile Gly Gly
405 410 415

Xaa Xaa Asn Asn Xaa Lys Lys Leu Gly Leu Pro Trp Xaa Ile Gly Pro

375

<210> 1361

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1361

His Ala Ser Ala Asp Ala Trp Ala Asp Ala Trp Val Ala Gly Ser Asp
1 5 10 15

Phe Ile Lys Thr Ser Thr Gly Lys Glu Thr Val Asn Ala Thr Phe Pro $20 \hspace{1cm} 25 \hspace{1cm} 30$

Val Ala Ile Val Met Leu Arg Ala Ile Arg Asp Phe Phe Trp Lys Thr
35 40 45

Gly Asn Lys Ile Gly Phe Lys Pro Ala Gly Gly Ile Arg Ser Ala Lys
50 55 60

Asp Ser Leu Ala Trp Leu Ser Leu Val Lys Glu Glu Leu Gly Asp Glu

1413

80 65 70 75 Trp Leu Lys Pro Glu Leu Phe Arg Ile Gly Ala Ser Thr Leu Leu Ser 85 Asp Ile Glu Arg Gln Ile Tyr His His Val Thr Gly Arg Tyr Ala Ala 100 105 Tyr His Asp Leu Pro Met Ser 115 <210> 1362 <211> 282 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (34) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (35) <223> Xaa equals any of the naturally occurring L-amino acids Gly Arg Val Gly Gly Arg Val Gly Arg Val Gly Phe Thr Ala Lys 5 10 Val Trp Asp Ala Val Ser Gly Asp Glu Leu Met Thr Leu Ala His Lys 25 His Xaa Xaa Lys Thr Val Asp Phe Thr Gln Asp Ser Asn Tyr Leu Leu 40 45 Thr Gly Gly Gln Asp Lys Leu Leu Arg Ile Tyr Asp Leu Asn Lys Pro Glu Ala Glu Pro Lys Glu Ile Ser Gly His Thr Ser Gly Ile Lys Lys Ala Leu Trp Cys Ser Glu Asp Lys Gln Ile Leu Ser Ala Asp Asp Lys 90 85 Thr Val Arg Leu Trp Asp His Ala Thr Met Thr Glu Val Lys Ser Leu 100 105 110

Asn Phe Asn Met Ser Val Ser Ser Met Glu Tyr Ile Pro Glu Gly Glu

1414

115 120 125 Ile Leu Val Ile Thr Tyr Gly Arg Ser Ile Ala Phe His Ser Ala Val 135 Ser Leu Asp Pro Ile Lys Ser Phe Glu Ala Pro Ala Thr Ile Asn Ser 150 155 Ala Ser Leu His Pro Glu Lys Glu Phe Leu Val Ala Gly Gly Glu Asp 170 Phe Lys Leu Tyr Lys Tyr Asp Tyr Asn Ser Gly Glu Glu Leu Glu Ser 180 185 Tyr Lys Gly His Phe Gly Pro Ile His Cys Val Arg Phe Ser Pro Asp 200 Gly Glu Leu Tyr Ala Ser Gly Ser Glu Asp Gly Thr Leu Arg Leu Trp 210 215 Gln Thr Val Val Gly Lys Thr Tyr Gly Leu Trp Lys Cys Val Leu Pro 230 225 235 Glu Glu Asp Ser Gly Glu Leu Ala Lys Pro Lys Ile Gly Phe Pro Glu 250 Thr Thr Glu Glu Glu Glu Glu Ile Ala Ser Glu Asn Ser Asp Cys 260 265 Ile Phe Pro Ser Ala Pro Asp Val Lys Ala 275 280 <210> 1363 <211> 334 <212> PRT <213> Homo sapiens <400> 1363 Thr Pro Arg Thr Pro Glu Pro His Lys Pro Gly Leu Ala Met Lys Pro 10 Gly Phe Ser Pro Arg Gly Gly Gly Phe Gly Gly Arg Gly Gly Phe Gly

Asp Arg Gly Gly Arg Gly Arg Gly Gly Phe Gly Gly Arg Gly

Arg Gly Gly Gly Phe Arg Gly Arg Gly Gly Gly Gly Gly Gly Gly

Gly 65	Gly	Gly	Gly	Gly	Gly 70	Gly	Arg	Gly	Gly	Gly 75	Gly	Phe	His	Ser	Gl ₃
Gly	Asn	Arg	Gly	Arg 85	Gly	Arg	Gly	Gly	Lys 90	Arg	Gly	Asn	Gln	Ser 95	Gly
Lys	Asn	Val	Met 100	Val	Glu	Pro	His	Arg 105	His	Glu	Gly	Val	Phe 110	Ile	Суя
Arg	Gly	Lys 115	Glu	Asp	Ala	Leu	Val 120	Thr	ГiХz	Asn	Leu	Val 125	Pro	Gly	Glı
Ser	Val 130	Tyr	Gly	Glu	Lys	Arg 135	Val	Ser	Ile	Ser	Glu 140	Gly	Asp	Asp	Lys
Ile 145	Glu	Tyr	Arg	Ala	Trp 150	Asn	Pro	Phe	Arg	Ser 155	Lys	Leu	Ala	Ala	Ala 160
Ile	Leu	Gly	Gly	Val 165	Asp	Gln	Ile	His	11e 170	Lys	Pro	Gly	Ala	Lys 175	Va.
Leu	Tyr	Leu	Gly 180	Ala	Ala	Ser	Gly	Thr 185	Thr	Val	Ser	His	Val 190	Ser	Asp
Ile	Val	Gly 195	Pro	Asp	Gly	Leu	Val 200	Tyr	Ala	Val	Glu	Phe 205	Ser	His	Arg
Ser	Gly 210	Arg	Asp	Leu	Ile	Asn 215	Leu	Ala	Lys	Lys	Arg 220	Thr	Asn	Ile	Ile
Pro 225	Val	Ile	Glu	Asp	Ala 230	Arg	His	Pro	His	Lys 235	Tyr	Arg	Met	Leu	Ile 240
Ala	Met	Val	Asp	Val 245	Ile	Phe	Ala	Asp	Val 250	Ala	Gln	Pro	Asp	Gln 255	Thi
Arg	Ile	Val	Ala 260	Leu	Asn	Ala	His	Thr 265	Phe	Leu	Arg	Asn	Gly 270	Gly	His
Phe	Val	Ile 275	Ser	Ile	Lys	Ala	Asn 280	Cys	Ile	Asp	Ser	Thr 285	Ala	Ser	Ala
Glu	Ala 290	Val	Phe	Ala	Ser	Glu 295	Val	Lys	Lys	Met	Gln 300	Gln	Glu	Asn	Met
Lys 305	Pro	Gln	Glu	Gln	Leu 310	Thr	Leu	Glu	Pro	Tyr 315	Glu	Arg	Asp	His	Ala 320
Val	Val	Val	Gly	Val 325	Tyr	Arg	Pro	Pro	Pro 330	Lys	Val	Lys	Asn		

1416

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1417

195 200 205 Thr Leu Ile Ile Arg Gly Lys Ile Arg Leu Arg Gln Ala Ser Trp Ile 210 215 Ile Arg Gly Gly Thr Glu Ala Asp Tyr Gln Leu His Asn Val Gln Val 235 230 Ile Cys His Thr Glu Ala Val Ala Glu Lys Leu Gly Gln Gln Val Asn 245 250 Arg Thr Cys Pro Gly Phe Leu Ala Asp Gly Gly Pro Trp Val Gln Asp Val Ala Tyr Asp Leu Trp Arg Glu Glu Asn Gly Cys Glu Cys Thr Lys 280 Ala Val Asn Phe Ala Met His Glu Leu Gln Leu Ile Arg Val Glu Lys 295 Gln Tyr Leu His His Asn Leu Asp His Leu Val Glu Glu Leu Phe Leu 310 315 Gly Asp Ile His Thr Asp Ala Thr Gln Arg Met Phe Tyr Arg Pro Ser Ser Tyr Gln Pro Pro Leu Gln Asn Ala Lys Asn His Asp His Ala Cys Ile Ala Cys Xaa Ile Ile Tyr Arg Ser Asp Glu His His Pro Pro Ile 355 360 Leu Pro Pro Lys Ala Asp Leu Thr Ile Gly Leu His Gly Glu Trp Val 375 Ser Gln Arg Cys Glu Val Arg Pro Glu Val Leu Phe Leu Thr Arg His 385 390 395 Phe Ile Phe His Asp Asn Asn Thr Trp Glu Gly His Tyr Tyr His 405 Tyr Ser Asp Pro Val Cys Lys His Pro Thr Phe Ser Ile Tyr Ala Arq 420 425 Gly Arg Tyr Ser Arg Gly Val Leu Ser Ser Arg Val Met Gly Gly Thr 435 440 Glu Phe Val Phe Lys Val Asn His Met Lys Val Thr Pro Met Asp Ala 455 Ala Thr Ala Ser Leu Leu Asn Val Phe Asn Gly Asn Glu Cys Gly Ala

1418

475

480

470

465

Glu Gly Ser Trp Gln Val Gly Ile Gln Gln Asp Val Thr His Thr Asn 485 490 Gly Cys Val Ala Leu Gly Ile Lys Leu Pro His Thr Glu Tyr Glu Ile 505 Phe Lys Met Glu Gln Asp Ala Arg Gly Arg Tyr Leu Leu Phe Asn Gly 520 Gln Arg Pro Ser Asp Gly Ser Ser Pro Asp Arg Pro Glu Lys Arg Ala 530 Thr Ser Tyr Gln Met Pro Leu Val Gln Cys Ala Ser Ser Pro Arg 550 555 Ala Glu Asp Leu Ala Glu Asp Ser Gly Ser Ser Leu Tyr Gly Arg Ala 565 570 Pro Gly Arg His Thr Trp Ser Leu Leu Ala Ala Leu Ala Cys Leu 580 585 590 Val Pro Leu Leu His Trp Asn Ile Arg Arg 595 600 <210> 1365 <211> 158 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (26) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (40) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (78) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (98)

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                                     10
Cys Thr Phe Thr Leu Leu Asn Lys Ala Xaa Ser Phe Phe Ser Leu Ser
                                 25
Val His Val Ser Phe Thr His Xaa Gly Gln Leu Pro His His Phe Phe
         35
                             40
                                                 45
Gly Val Ala Trp Gln Glu Pro Gln Val Leu His Leu Gly Glu Pro Asp
                         55
Arg Arg Leu Gln Lys Arg Ile Lys Ala Ile Lys Leu Gln Xaa Ile Leu
Gln Met Glu Pro Gln Met Ser Ser Ala His Gly Phe Tyr Arg Gly Pro
                 85
                                     90
Leu Xaa Gln Pro Ala Gly Pro Ser Ile Thr Leu Glu Asn Ser Pro Leu
                                105
            100
Glu Asp Thr Lys Leu Gln Gly Pro Phe Phe Thr Pro Asn Gln Glu Glu
                            120
Val Ala Arg Thr Asp Cys His Xaa Val Pro Asn Ser Xaa Xaa Gly Cys
   130
                        135
Pro Val Leu Glu Ala Gly Phe Arg Gly Gly Ala Gln Leu Gly
145
                    150
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<211> 466
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Ile Gln Gly Ser Leu Gly Arg Leu Ser Ser Ala Val Pro Gly Ser Gly
             20
                                 25
                                                      30
Ala Glu Leu Ser Pro Val Pro Asn Thr Asp Gly Thr Met Asn Ser Gly
         35
                             40
His Ser Phe Ser Gln Thr Pro Ser Ala Ser Phe His Gly Ala Gly Gly
Gly Trp Gly Arg Pro Arg Ser Phe Pro Arg Ala Pro Thr Val His Gly
65
                     70
                                         75
Gly Ala Gly Gly Ala Arg Ile Ser Leu Ser Phe Thr Thr Arg Ser Cys
                 85
                                     90
Pro Pro Pro Gly Gly Ser Trp Gly Ser Gly Arg Ser Ser Pro Leu Leu
            100
                                105
                                                     110
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GIÀ	GLY	Asn 115	GLY	Lys	Ala	Thr	Met 120	Gln	Asn	Leu	Asn	125	Arg	Leu	Ala
Ser	Туг 130	Leu	Glu	Lys	Val	Arg 135	Ala	Leu	Glu	Glu	Ala 140	Asn	Met	Lys	Let
Glu 145	Ser	Arg	Ile	Leu	Lys 150	Trp	His	Gln	Gln	Arg 155	Asp	Pro	Gly	Ser	Lys 160
Lys	Asp	Tyr	Ser	Gln 165	Tyr	Glu	Glu	Asn	Ile 170	Thr	His	Leu	Gln	Glu 175	Glr
Ile	Val	Asp	Gly 180	Lys	Met	Thr	Asn	Ala 185	Gln	Ile	Ile	Leu	Leu 190	Ile	Asp
Asn	Ala	Arg 195	Met	Ala	Val	Asp	Asp 200	Phe	Asn	Leu	Lys	Xaa 205	Glu	Asn	Glu
His	Ser 210	Phe	Lys	Lys	Asp	Leu 215	Glu	Ile	Glu	Val	Xaa 220	Gly	Leu	Arg	Arc
Thr 225	Leu	Asp	Asn	Leu	Thr 230	Ile	Val	Thr	Thr	Asp 235	Leu	Glu	Gln	Glu	Val 240
Glu	Gly	Met	Arg	Lys 245	Glu	Leu	Ile	Leu	Met 250	Lys	Lys	His	His	Glu 255	Glr
Glu	Met	Glu	Lys 260	His	His	Val	Pro	Ser 265	Asp	Phe	Asn	Val	Asn 270	Val	Lys
Val	Asp	Thr 275	Gly	Pro	Arg	Glu	Asp 280	Leu	Ile	Lys	Val	Leu 285	Glu	Asp	Met
Arg	Gln 290	Glu	Tyr	Glu	Leu	Ile 295	Ile	Lys	Lys	Lys	His 300	Arg	Asp	Leu	Asp
Thr 305	Trp	Tyr	Lys	Glu	Gln 310	Ser	Ala	Ala	Met	Ser 315	Gln	Glu	Ala	Ala	Ser 320
Pro	Ala	Thr	Val	Gln 325	Ser	Arg	Gln	Gly	Asp 330	Ile	His	Glu	Leu	Lys 335	Arg
Thr	Phe	Gln	Ala 340	Leu	Glu	Ile	Asp	Leu 345	Gln	Xaa	Gln	Tyr	Ser 350	Thr	Lys
Ser	Ala	Leu 355	Glu	Asn	Met	Leu	Ser 360	Glu	Thr	Gln	Ser	Arg 365	Tyr	Ser	Cys
Lys	Leu		Asp	Met		Glu 375		Ile	Ser		Tyr		Glu	Glu	Leu

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Thr Gln Leu Arg His Glu Leu Glu Arg Gln Asn Asn Glu Tyr Gln Val
                    390
                                         395
Leu Leu Gly Ile Lys Thr His Leu Glu Lys Glu Ile Thr Thr Tyr Arg
                                     410
                405
Arg Leu Leu Glu Gly Glu Ser Glu Gly Thr Arg Glu Glu Ser Lys Ser
            420
                                 425
                                                     430
Ser Met Lys Val Ser Ala Thr Pro Lys Ile Lys Ala Ile Thr Gln Glu
        435
                             440
Thr Ile Asn Gly Arg Leu Val Leu Cys Gln Val Asn Glu Ile Gln Lys
                        455
                                             460
His Ala
465
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1423

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Ser 1	Asp	Asn	Xaa	Thr 5	Asn	Gly	Суз	Gly	Leu 10	Glu	Ser	Xaa	Gly	Asn 15	Thr
Val	Thr	Pro	Val 20	Asn	Val	Asn	Glu	Val 25	Lys	Pro	Ile	Asn	Lys 30	Gly	Glu
Glu	Gln	Ile 35	Gly	Phe	Glu	Leu	Val 40	Glu	Lys	Leu	Phe	Gln 45	Gly	Gln	Leu
Val	Leu 50	Arg	Thr	Arg	Cys	Leu 55	Glu	Cys	Glu	Ser	Leu 60	Thr	Glu	Arg	Arg
Glu 65	Asp	Phe	Gln	Asp	11e 70	Ser	Val	Pro	Val	Gln 75	Glu	Asp	Glu	Leu	Ser 80
Lys	Val	Glu	Glu	Ser 85	Ser	Glu	Ile	Ser	Pro 90	Glu	Pro	Lys	Thr	Glu 95	Met
Lys	Thr	Leu	Arg 100	Trp	Ala	Ile	Ser	Gln 105	Phe	Ala	Ser	Val	Glu 110	Arg	Ile
Val	Gly	Glu 115	Asp	Lys	Tyr	Phe	Cys 120	Glu	Asn	Cys	His	His 125	Tyr	Thr	Glu
Ala	Glu 130	Arg	Ser	Leu	Leu	Phe 135	Asp	Lys	Met	Pro	Glu 140	Val	Ile	Thr	Ile
His 145	Leu	Lys	Cys	Phe	Ala 150	Ala	Ser	Gly	Leu	Glu 155	Phe	Asp	Cys	Tyr	Gly 160
Gly	Gly	Leu	Ser	Lys 165	Ile	Asn	Thr	Pro	Leu 170	Leu	Thr	Pro	Leu	Lys 175	Leu
Ser	Leu	Glu	Glu 180	Trp	Ser	Thr	Lys	Pro 185	Thr	Asn	Asp	Ser	Туг 190	Gly	Leu
Phe	Ala	Val 195	Val	Met	His	Ser	Gly 200		Thr	Ile	Ser	Ser 205	Gly	His	Tyr
Thr	Ala 210	Ser	Val	Lys	Val	Thr 215	Asp	Leu	Asn	Ser	Leu 220	Glu	Leu	Asp	Lys
Gly 225	Asn	Phe	Val	Val	Asp 230	Gln	Met	Cys	Glu	Ile 235	Gly	Lys	Pro	Glu	Pro 240
Leu	Asn	Glu	Glu	Glu 245	Ala	Arg	Gly	Val	Val 250	Glu	Asn	Tyr	Asn	Asp 255	Glu
Glu	Val	Ser	Ile	Arg	Val	Gly	Gly	Asn	Thr	Gln	Pro	Ser	Lys	Val	Leu

1425

265 260 270 Asn Lys Lys Asn Val Glu Ala Ile Gly Leu Leu Gly Gly Gln Lys Ser 280 275 Lys Ala Asp Tyr Glu Leu Tyr Asn Lys Ala Ser Asn Pro Asp Lys Val 295 Ala Ser Thr Ala Phe Ala Glu Asn Arg Asn Ser Glu Thr Ser Asp Thr 310 315 Thr Gly Thr His Glu Ser Asp Arg Asn Lys Glu Ser Ser Asp Gln Thr 325 330 Gly Ile Asn Ile Ser Gly Phe Glu Asn Lys Ile Ser Tyr Val Val Gln 340 345 Ser Leu Lys Glu Tyr Glu Gly Lys Trp Leu Leu Phe Asp Asp Ser Glu 355 360 365 Val Lys Val Thr Glu Glu Lys Asp Phe Leu Asn Ser Leu Ser Pro Ser 370 375 Thr Ser Pro Thr Ser Thr Pro Tyr Leu Leu Phe Tyr Lys Lys Leu 390 395 <210> 1369 <211> 260 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1369 Val Phe Xaa Ser Phe Phe Ala Glu Lys Glu Gln Glu Ala Ile Glu 10 His Ile Asp Glu Val Gln Asn Glu Ile Asp Arg Leu Asn Glu Gln Ala 20 25 Ser Glu Glu Ile Leu Lys Val Glu Gln Lys Tyr Asn Lys Leu Arg Gln 35 40 Pro Phe Phe Gln Lys Arg Ser Glu Leu Ile Ala Lys Ile Pro Asn Phe

55

Trp Val Thr Thr Phe Val Asn His Pro Gln Val Ser Ala Leu Leu Gly 70 Glu Glu Asp Glu Glu Ala Leu His Tyr Leu Thr Arg Val Glu Val Thr Glu Phe Glu Asp Ile Lys Ser Gly Tyr Arg Ile Asp Phe Tyr Phe Asp 105 Glu Asn Pro Tyr Phe Glu Asn Lys Val Leu Ser Lys Glu Phe His Leu 115 120 125 Asn Glu Ser Gly Asp Pro Ser Ser Lys Ser Thr Glu Ile Lys Trp Lys 135 Ser Gly Lys Asp Leu Thr Lys Arg Ser Ser Gln Thr Gln Asn Lys Ala 145 150 Ser Arg Lys Arg Gln His Glu Glu Pro Glu Ser Phe Phe Thr Trp Phe 165 170 Thr Asp His Ser Asp Ala Gly Ala Asp Glu Leu Gly Glu Val Ile Lys 185 Asp Asp Ile Trp Pro Asn Pro Leu Gln Tyr Tyr Leu Val Pro Asp Met 195 200 Asp Asp Glu Glu Glu Glu Glu Glu Asp Asp Asp Asp Glu Glu Glu Glu Gly Leu Glu Asp Ile Asp Glu Glu Gly Asp Glu Asp Glu Gly 230 235 Glu Glu Asp Glu Asp Asp Glu Gly Glu Glu Glu Glu Glu Asp Glu

Gly Glu Asp Asp 260

245

<210> 1370

<211> 155

<212> PRT

<213> Homo sapiens

<400> 1370

Lys Gly Glu Ala Ala Ala Phe Ser Ala Thr Phe Pro Ile Ala Arg Gln
1 5 10 15

250

Glu Phe Leu Ser Val Thr Thr Ile Ala Val Met Ser Gly Arg Gly Lys

1427

20 25 30 Gln Gly Gly Lys Ala Arg Ala Lys Ala Lys Ser Arg Ser Ser Arg Ala Gly Leu Gln Phe Pro Val Gly Glu Cys Ile Ala Leu Arg Lys Gly Asn Tyr Ala Glu Arg Val Gly Ala Gly Ala Pro Val Tyr Met Ala Ala Val 70 Leu Glu Tyr Leu Thr Ala Glu Ile Leu Glu Leu Ala Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His Leu Gln Leu Ala Ile Arg Asn Asp Glu Glu Leu Asn Lys Leu Gly Lys Val Thr Ile 120 Ala Gln Gly Gly Val Leu Pro Asn Ile Gln Ala Val Leu Leu Pro Lys 130 135 Lys Thr Glu Ser His His Lys Ala Lys Gly Lys 150 <210> 1371 <211> 140 <212> PRT <213> Homo sapiens <400> 1371 Phe Pro Gly Arg Thr His Ala Leu Cys Arg Gly Ala Ala Ser Arg Gly Leu Leu Cys Lys Trp Ala Pro Trp Pro Ser Ala Pro Val Pro Ala Thr 25 Arg Asp Arg Ala Pro Arg Pro Ala Arg Gly Arg Arg Pro Asp Pro Thr 35 Ser Gln Gln Ala Lys Ala Trp Arg Pro Ser Pro Pro Ala Ala Arg Ser Trp Pro Pro Thr Thr Thr Gly Ala Ala Trp Val Pro Leu Pro Ala 75 Thr Ala Pro Ala Ala Val Pro Ser Ala Pro Gly Lys Pro Phe Pro Thr

90

1428

Pro Gln Val Ser Pro Arg Leu Thr Arg Val Ile Gly Gly Pro Ala Ser

```
100
                                105
Phe Ser Gly Ser Pro Pro Ser Arg Ser Trp Pro Arg Cys Trp Ser Pro
                            120
        115
                                                 125
Gln Ser Thr Arg Asn Leu Pro Arg Pro Pro Ala Ala
    130
                        135
<210> 1372
<211> 150
<212> PRT
<213> Homo sapiens
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Pro Trp Thr Leu Gly Gly Pro Glu Leu Asp Ala Met Gly Gly Cys Ala
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1429

Gly Ser Arg Arg Arg Phe Ser Asp Ser Glu Gly Glu Glu Thr Val Pro 20 25 30

Glu Pro Arg Leu Pro Leu Leu Asp His Gln Gly Ala His Trp Lys Asn 35 40 45

Ala Val Gly Phe Trp Leu Leu Gly Leu Cys Asn Asn Phe Ser Tyr Val 50 55 60

Val Met Leu Ser Ala Ala His Asp Ile Leu Ser His Lys Arg Thr Ser 65 70 75 80

Gly Asn Gln Ser His Val Asp Pro Gly Pro Thr Pro Ile Pro His Asn
85 90 95

Ser Ser Ser Arg Phe Asp Cys Asn Ser Val Ser Thr Ala Ala Val Leu 100 105 110

Leu Ala Asp Ile Leu Pro Thr Leu Val Ile Lys Leu Leu Xaa Xaa Xaa 115 120 125

Gly Leu His Leu Leu Pro Xaa Thr Val Glu Asp Ala Val Xaa Leu Cys 130 135 140

Ala Leu Xaa Gly Thr Ala 145 150

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<211> 128

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<220>

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Arg Ala Phe Ala Xaa Leu Gly Trp Ser Ser Gly Arg Val Ser Arg Pro 20 25 30

1430

Glu His Val Asp Ala His Pro Pro Leu Ser Leu Met Glu Val Val Thr
35 40 45

Phe Gly Asp Val Ala Val His Phe Ser Arg Glu Glu Trp Gln Cys Leu 50 55 60

Asp Pro Gly Gln Arg Ala Leu Tyr Arg Glu Val Met Leu Glu Asn His
65 70 75 80

Ser Ser Val Ala Gly Leu Ala Gly Phe Leu Val Phe Lys Pro Glu Leu 85 90 95

Ile Ser Arg Leu Glu Gln Gly Glu Glu Pro Trp Val Leu Asp Leu Gln
100 105 110

Gly Ala Glu Gly Thr Glu Ala Pro Xaa Thr Ser Lys Thr Gly Glu Ala 115 120 125

<210> 1374

<211> 398

<212> PRT

<213> Homo sapiens

<400> 1374

Ser Ser Trp Leu Arg Ser Arg Ser Gly Met Gln Thr Asp Leu Gln Asn
1 5 10 15

Leu Gly Asn Asp Ser Gly Asp His Ser Asp His Met His Tyr Tyr Gln 20 25 30

Gly Lys Lys Tyr Phe Arg Asp Arg Gly Gly Gly Arg Asn Ser Asp 35 40 45

Trp Ser Ser Asp Thr Asn Arg Gln Gly Gln Gln Ser Ser Ser Asp Cys 50 55 60

Tyr Ile Tyr Asp Ser Ala Thr Gly Tyr Tyr Tyr Asp Pro Leu Ala Gly 65 70 75 80

Thr Tyr Tyr Asp Pro Asn Thr Gln Glu Val Tyr Val Pro Gln Asp 85 90 95

Pro Gly Leu Pro Glu Glu Glu Glu Ile Lys Glu Lys Lys Pro Thr Ser 100 105 110

Gln Gly Lys Ser Ser Ser Lys Lys Glu Met Ser Lys Arg Asp Gly Lys

1431

115 120 125 Glu Lys Lys Asp Arg Gly Val Thr Arg Phe Gln Glu Asn Ala Ser Glu 130 135 Gly Lys Ala Pro Ala Glu Asp Val Phe Lys Lys Pro Leu Pro Pro Thr 150 155 Val Lys Lys Glu Glu Ser Pro Pro Pro Pro Lys Val Val Asn Pro Leu 170 Ile Gly Leu Leu Gly Glu Tyr Gly Gly Asp Ser Asp Tyr Glu Glu Glu 180 Glu Glu Glu Gln Thr Pro Pro Pro Gln Pro Arg Thr Ala Gln Pro 200 Gln Lys Arg Glu Glu Gln Thr Lys Lys Glu Asn Glu Glu Asp Lys Leu 215 Thr Asp Trp Asn Lys Leu Ala Cys Leu Leu Cys Arg Arg Gln Phe Pro 225 230 235 Asn Lys Glu Val Leu Ile Lys His Gln Gln Leu Ser Asp Leu His Lys 250 Gln Asn Leu Glu Ile His Arg Lys Ile Lys Gln Ser Glu Gln Glu Leu 265 Ala Tyr Leu Glu Arg Arg Glu Arg Glu Gly Lys Phe Lys Gly Arg Gly 275 280 Asn Asp Arg Arg Glu Lys Leu Gln Ser Phe Asp Ser Pro Glu Arg Lys 295 Arg Ile Lys Tyr Ser Arg Glu Thr Asp Ser Asp Arg Lys Leu Val Asp 305 310 Lys Glu Asp Ile Asp Thr Ser Ser Lys Gly Gly Cys Val Gln Gln Ala 325 Thr Gly Trp Arg Lys Gly Thr Gly Leu Gly Tyr Gly His Pro Gly Leu 345 Ala Ser Ser Glu Glu Ala Glu Gly Arg Met Arg Gly Pro Ser Val Gly 355 360 365 Ala Ser Gly Arg Thr Ser Lys Arg Gln Ser Asn Glu Thr Tyr Arg Asp Ala Val Arg Arg Val Met Phe Ala Arg Tyr Lys Glu Leu Asp

1432

385 390 395

<210> 1375

<211> 167

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (157)

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<220>

<221> SITE

<222> (161)

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<220>

<221> SITE

<222> (163)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1375

His Arg Gly Lys Arg Tyr Thr Asp Ser Thr Val Arg Asn Ser Arg Val
1 5 10 15

Asp Pro Arg Val Arg Ser Ala Lys Pro Glu Ser Cys Pro Phe Ser Leu 20 25 30

Pro Gly Gln His Glu Leu His His Ser Leu His Leu Leu His Gln Leu 35 40 45

Pro Val Pro Gly Leu Cys Pro Gly Ala Gln Leu Arg Arg Pro Ala Gly 50 55 60

Gln Gln Arg Gly Gln Arg Leu Cys Arg Arg Trp Gly Leu Trp Phe Pro 65 70 75 80

Asp Leu Arg Val Pro Leu His Gln Leu Gln Gly Arg His Gly Val Arg
85 90 95

Gly Pro Gly His Arg Asp Ser Arg Gly Ser Gly Arg Asn Gly Ser Ile 100 105 110

Gln Asn Glu Lys Glu Thr Met Gln Lys Leu Asn Asp Arg Leu Ala Ser 115 120 125

Tyr Leu Asp Lys Met Lys Glu Pro Gly Asp Arg Glu Thr Gly Gly Trp 130 135 140

Lys Ala Lys Thr Arg Glu His Phe Gly Glu Glu Gly Xaa Gln Val Arg 145 150 155 160

Xaa Trp Xaa Pro Leu Ile Gln 165

<210> 1376

<211> 448

<212> PRT

<213> Homo sapiens

<400> 1376

Leu Pro Asp Val Glu Lys Leu Gly Arg Arg Arg Gly Arg Lys Met Asp 1 5 10 15

Ser Val Glu Lys Gly Ala Ala Thr Ser Val Ser Asn Pro Arg Gly Arg 20 25 30

Pro Ser Arg Gly Arg Pro Pro Lys Leu Gln Arg Asn Ser Arg Gly Gly 35 40 45

Gln Gly Arg Gly Val Glu Lys Pro Pro His Leu Ala Ala Leu Ile Leu 50 55 60

Ala Arg Gly Gly Ser Lys Gly Ile Pro Leu Lys Asn Ile Lys His Leu 65 70 75 80

Ala Gly Val Pro Leu Ile Gly Trp Val Leu Arg Ala Ala Leu Asp Ser 85 90 95

Gly Ala Phe Gln Ser Val Trp Val Ser Thr Asp His Asp Glu Ile Glu 100 105 110

Asn Val Ala Lys Gln Phe Gly Ala Gln Val His Arg Arg Ser Ser Glu 115 120 125

Val Ser Lys Asp Ser Ser Thr Ser Leu Asp Ala Ile Ile Glu Phe Leu 130 135 140

Asn Tyr His Asn Glu Val Asp Ile Val Gly Asn Ile Gln Ala Thr Ser 145 150 155 160

Pro Cys Leu His Pro Thr Asp Leu Gln Lys Val Ala Glu Met Ile Arg 165 170 175

Glu Glu Gly Tyr Asp Ser Val Phe Ser Val Val Arg Arg His Gln Phe 180 185 190

Arg	Trp	Ser 195	Glu	Ile	Gln	Lys	Gly 200	Val	Arg	Glu	Val	Thr 205	Glu	Pro	Leu
Asn	Leu 210	Asn	Pro	Ala	Lys	Arg 215	Pro	Arg	Arg	Gln	Asp 220	Trp	Asp	Gly	Glu
Leu 225	Tyr	Glu	Asn	Gly	Ser 230	Phe	Tyr	Phe	Ala	Lys 235	Arg	His	Leu	Ile	Glu 240
Met	Gly	Tyr	Leu	Gln 245	Gly	Gly	Lys	Met	Ala 250	Tyr	Tyr	Glu	Met	Arg 255	Ala
Glu	His	Ser	Val 260	Asp	Ile	Asp	Val	Asp 265	Ile	Asp	Trp	Pro	Ile 270	Ala	Glu
Gln	Arg	Val 275	Leu	Arg	Tyr	Gly	Tyr 280	Phe	Gly	Lys	Glu	Lys 285	Leu	Lys	Glu
Ile	Lys 290	Leu	Leu	Val	Cys	Asn 295	Ile	Asp	Gly	Cys	Leu 300	Thr	Asn	Gly	His
Ile 305	Tyr	Val	Ser	Gly	Asp 310	Gln	Lys	Glu	Ile	Ile 315	Ser	Tyr	Asp	Val	Lys 320
Asp	Ala	Ile	Gly	Ile 325	Ser	Leu	Leu	Lys	Lys 330	Ser	Gly	Ile	Glu	Val 335	Arg
Leu	Ile	Ser	Glu 340	Arg	Ala	Cys	Ser	Lys 345	Gln	Thr	Leu	Ser	Ser 350	Leu	Lys
Leu	Asp	Cys 355	Lys	Met	Glu	Val	Ser 360	Val	Ser	Asp	Lys	Leu 365	Ala	Val	Val
Asp	Glu 370	Trp	Arg	Lys	Glu	Met 375	Gly	Leu	Cys	Trp	Lys 380	Glu	Val	Ala	Tyr
Leu 385	Gly	Asn	Glu	Val	Ser 390	Asp	Glu	Glu	Cys	Leu 395	Lys	Arg	Val	Gly	Leu 400
Ser	Gly	Ala	Pro	Ala 405	Asp	Ala	Cys	Ser	Thr 410	Ala	Gln	Lys	Ala	Val 415	Gly
Tyr	Ile	Cys	Lys 420	Cys	Asn	Gly	Gly	Arg 425	Gly	Ala	Ile	Arg	Glu 430	Phe	Ala
Glu	His	Ile 435	Cys	Leu	Leu	Met	Glu 440	Lys	Val	Asn	Asn	Ser 445	Cys	Gln	Lys

WO 00/55350

<210> 1377

	1> 40 2> PI														
<213	3> н	omo :	sapi	ens											
	0> 13		Δla	Tue	Met	בומ	Δla	Ser	Cve	T.Au	Val	T.Ou	T.011	Δla	T. 🗪
1	Gry	110	AIG	Бу 5	Mec	AIG	AIG	per	10	пец	val	Беч	Dea	15	Бе
-			20		Leu			25	-	-	-	-	30	-	·
Arg	Gly	Arg 35	Ala	Ala	Arg	His	Val 40	Val	Ala	Val	Val	Leu 45	Gly	Asp	Va:
Gly	Arg 50	Ser	Pro	Arg	Met	Gln 55	Tyr	His	Ala	Leu	Ser 60	Leu	Ala	Met	His
Gly 65	Phe	Ser	Val	Thr	Leu 70	Leu	Gly	Phe	Cys	Asn 75	Ser	Lys	Pro	His	Asp 80
Glu	Leu	Leu	Gln	Asn 85	Asn	Arg	Ile	Gln	Ile 90	Val	Gly	Leu	Thr	Glu 95	Lei
Gln	Ser	Leu	Ala 100	Val	Gly	Pro	Arg	Val 105	Phe	Gln	Tyr	Gly	Val 110	Lys	Va]
Val	Leu	Gln 115	Ala	Met	Tyr	Leu	Leu 120	Trp	Lys	Leu	Met	Trp 125	Arg	Glu	Pro
Gly	Ala 130	Tyr	Ile	Phe	Leu	Gln 135	Asn	Pro	Pro	Gly	Leu 140	Pro	Ser	Ile	Ala
Val 145	Cys	Trp	Phe	Val	Gly 150	Cys	Leu	Cys	Gly	Ser 155	Lys	Leu	Val	Ile	Asp 160
Trp	His	Asn	Tyr	Gly 165	Tyr	Ser	Ile	Met	Gly 170	Leu	Val	His	Gly	Pro 175	Asr
His	Pro	Leu	Val 180	Leu	Leu	Ala	Lys	Trp 185	Tyr	Glu	Lys	Phe	Phe 190	Gly	Arg
Leu	Ser	His 195	Leu	Asn	Leu	Cys	Val 200	Thr	Asn	Ala	Met	Arg 205	Glu	Asp	Leu
Ala	Asp 210	Asn	Trp	His	Ile	Arg 215	Ala	Val	Thr	Val	Tyr 220	Asp	Lys	Pro	Ala
C 0 T	Dho	Bho	Tvc	G1.,	mh.~	Dro	T 011	7.00	Ton	Gln	Hie	λκα	Ten	Dho	Mat

1436

225					230					235					240
Lys	Leu	Gly	Ser	Met 245	His	Ser	Pro	Phe	Arg 250	Ala	Arg	Ser	Glu	Pro 255	Glu
Asp	Pro	Val	Thr 260	Glu	Arg	Ser	Ala	Phe 265	Thr	Glu	Arg	Asp	Ala 270	Gly	Ser
Gly	Leu	Val 275	Thr	Arg	Leu	Arg	Glu 280	Arg	Pro	Ala	Leu	Leu 285	Val	Ser	Ser
Thr	Ser 290	Trp	Thr	Glu	Asp	Glu 295	Asp	Phe	Ser	Ile	Leu 300	Leu	Ala	Ala	Leu
Glu 305	Lys	Phe	Glu	Gln	Leu 310	Thr	Leu	Asp	Gly	His 315	Asn	Leu	Pro	Ser	Leu 320
Val	Cys	Val	Ile	Thr 325	Gly	Lys	Gly	Pro	Leu 330	Arg	Glu	Tyr	Tyr	Ser 335	Arg
Leu	Ile	His	Gln 340	Lys	His	Phe	Gln	His 345	Ile	Gln	Val	Cys	Thr 350	Pro	Trp
Leu	Glu	Ala 355	Glu	Asp	Tyr	Pro	Leu 360	Leu	Leu	Gly	Ser	Ala 365	Asp	Leu	Gly
Val	Cys 370	Leu	His	Thr	Ser	Ser 375	Ser	Gly	Leu	Asp	Leu 380	Pro	Met	Lys	Val
Val 385	Asp	Met	Phe	Gly	Cys 390	Cys	Leu	Pro	Val	Cys 395	Ala	Val	Asn	Phe	Lys 400
Cys	Leu	His	Glu	Leu 405	Val	Lys	His	Glu	Glu 410	Asn	Gly	Leu	Val	Phe 415	Glu
Asp	Ser	Glu	Glu 420	Leu	Ala	Ala	Gln	Leu 425	Gln	Met	Leu	Phe	Ser 430	Asn	Phe
Pro	Asp	Pro 435	Ala	Gly	Lys	Leu	Asn 440	Gln	Phe	Arg	Lys	Asn 445	Leu	Arg	Glu
Ser	Gln 450	Gln	Leu	Arg	Trp	Asp 455	Glu	Ser	Trp	Val	Gln 460	Thr	Val	Leu	Pro
Leu	Val	Met	Asp	Thr											

Leu Val Met Asp Thr 465

<210> 1378 <211> 314

<212> PRT <213> Homo sapiens <220> <221> SITE <222> (93) <223> Xaa equals any of the naturally occurring L-amino acids Glu Lys Ala Ala Gly Ala Gly Lys Ser His Leu Ala Ile Val Gln Lys 10 Val Asn Asn Glu Gly Glu Gly Asp Pro Phe Tyr Glu Val Leu Gly Leu Val Thr Leu Glu Asp Val Ile Glu Glu Ile Ile Lys Ser Glu Ile Leu Asp Glu Ser Asp Met Tyr Thr Asp Asn Arg Ser Arg Lys Arg Val Ser Glu Lys Asn Lys Arg Asp Phe Ser Ala Phe Lys Asp Ala Asp Asn Glu 70 75 Leu Lys Val Lys Ile Ser Pro Gln Leu Leu Leu Ala Xaa His Arg Phe 85 90 Leu Ala Thr Glu Val Ser Gln Phe Ser Pro Ser Leu Ile Ser Glu Lys 105 Ile Leu Leu Arg Leu Leu Lys Tyr Pro Asp Val Ile Gln Glu Leu Lys 120 Phe Asp Glu His Asn Lys Tyr Tyr Ala Arg His Tyr Leu Tyr Thr Arg 130 Asn Lys Pro Ala Asp Tyr Phe Ile Leu Ile Leu Gln Gly Lys Val Glu 150 155 Val Glu Ala Gly Lys Glu Asn Met Lys Phe Glu Thr Gly Ala Phe Ser 165 170 Tyr Tyr Gly Thr Met Ala Leu Thr Ser Val Pro Ser Asp Arg Ser Pro 180 Ala His Pro Thr Pro Leu Ser Arg Ser Ala Ser Leu Ser Tyr Pro Asp 195 200 205 Arg Thr Asp Val Ser Thr Ala Ala Thr Leu Ala Gly Ser Ser Asn Gln

215

1438

Phe Gly Ser Ser Val Leu Gly Gln Tyr Ile Ser Asp Phe Ser Val Arg 225 230 235 240

Ala Leu Val Asp Leu Gln Tyr Ile Lys Ile Thr Arg Gln Gln Tyr Gln 245 250 255

Asn Gly Leu Leu Ala Ser Arg Met Glu Asn Ser Pro Gln Phe Pro Ile 260 265 270

Asp Gly Cys Thr Thr His Met Glu Asn Leu Ala Glu Lys Ser Glu Leu 275 280 285

Pro Val Val Asp Glu Thr Thr Leu Leu Asn Glu Arg Asn Ser Leu 290 295 300

Leu His Lys Ala Ser His Glu Asn Ala Ile 305 310

<210> 1379

<211> 131

<212> PRT

<213> Homo sapiens

<400> 1379

Ser Cys Pro Val Leu Lys Met Phe Pro Glu Gln Gln Lys Glu Glu Phe 1 5 10 15

Val Ser Val Trp Val Arg Asp Pro Arg Ile Gln Lys Glu Asp Phe Trp 20 25 30

His Ser Tyr Ile Asp Tyr Glu Ile Cys Ile His Thr Asn Ser Met Cys 35 40 45

Phe Thr Met Lys Thr Ser Cys Val Arg Arg Tyr Arg Glu Phe Val 50 55 60

Trp Leu Arg Gln Arg Leu Gln Ser Asn Ala Leu Leu Val Gln Leu Pro 65 70 75 80

Glu Leu Pro Ser Lys Asn Leu Phe Phe Asn Met Asn Asn Arg Gln His
85 90 95

Val Asp Gln Arg Arg Gln Gly Leu Gly Asn Phe Leu Arg Lys Val Leu
100 105 110

Gln Met His Phe Cys Phe Gln Ile Ala Ala Phe Thr Ser Ser Leu Gln 115 120 125

Ser His Leu

1	<21	0> 13	380													
<pre><213> Homo sapiens</pre> <pre><400> 1380 Pro Gly Ala Ala Trp 5</pre>	<21	1> 2	19													
Company Comp	<21	2> P	RT													
Company Comp	<21	3> Ho	omo s	sapie	ens											
Pro 1 1 Gly Ala Ala Rala Trp 5 Ser Arg Pro 2 20 Asp Leu 10 Arg Gly Cys Cys Thr 15 Cly 15 Pro 15 Cys Pro 20				•												
Pro 1 1 Gly Ala Ala Rala Trp 5 Ser Arg Pro 2 20 Asp Leu 10 Arg Gly Cys Cys Thr 15 Cly 15 Pro 15 Cys Pro 20	<400	0> 13	380													
1				Δla	Trn	Ser	Δrσ	Pro	Asn	T.e.11	Ara	Glv	Cvs	Cvs	Thr	Glv
Pro Gln Pro Ala Leu Rrg Met Zeu St Leu Zeu St Leu Pro Ser Pro Cys Pro Gln Pro Leu Ala St Phe Ser Ser Val Glu Thr Met Glu Gly Pro Gly Pro Pro Arg Arg Arg Arg Ser Pro Glu Pro Gly Pro Ser Ser Ser Ser Ser Glo Gly Pro Arg Arg Arg Arg Ser Pro Arg Pro Ser		CLI	1114	*****	_	DCI	<i>,,,</i>	110	1100		9	CLI	C, D	0,0		
Pro Leu Ala Phe Ser Ser Val Glu Thr Met Glu Gly Pro Arg Arg Arg Arg Ser	1				5					10					13	
Pro Leu Ala Phe Ser Ser Val Glu Thr Met Glu Gly Pro Arg Arg Arg Arg Ser	_		_		_	_		_		_	_	_	_	_	_	~-
Pro Leu Ala 35 Phe Ser Ser Ser Val 40 Thr Met Glu	Pro	GIn	Pro		Leu	Arg	Met	Leu		Leu	Pro	ser	Pro	_	Pro	GIN
The Cys arg Ser Pro Glu Pro Gly Pro Ser Ser Ile Gly Ser Pro Gly Rome And Ser Ser Ile Gly Ser Pro Gln Ala Ser Ser Pro Rome And Rome And Gly Val Pro Rome And				20					25					30		
The Cys arg Ser Pro Glu Pro Gly Pro Ser Ser Ile Gly Ser Pro Gly Rome And Ser Ser Ile Gly Ser Pro Gln Ala Ser Ser Pro Rome And Rome And Gly Val Pro Rome And			_				_	_			_	_				
Thr Cys Arg Ser Pro Glu Pro Sely Pro Ser Ser Ser Ile Gly Ser Pro Some Ser Ser Ser Ser Ile Gly Ser Pro Some Ser Ser Ser Ser Ser Ser Ile Gly Ser	Pro	Leu	Ala	Phe	Ser	Ser	Val	Glu	Thr	Met	Glu	Gly	Pro	Pro	Arg	Arg
S			35					40					45			
S																
Gln Ala Ser Pro Pro Arg Pro Asn His Tyr Leu Leu Ile Asp Thr 80 Gln Gly Val Pro Tyr Thr Val Leu Val Asp Glu Glu Ser Glu Arg Glu Pro Gly Ala Ser Arg Val Pro Gly Fyr Lys Lys Cys Tyr Ser Gly Pro Pro Arg Arg Pro Pro Met Ser Tyr Leu Ser Tyr Pro	Thr	Cys	Arg	Ser	Pro	Glu	Pro	Gly	Pro	Ser	Ser	Ser	Ile	Gly	Ser	Pro
65		50					55					60				
65																
Glu Val Pro Tyr 85 Thr Val Leu Val 99 Glu Glu Ser Glu Arg 95 Glu Pro Glu Asp 90 Glu Glu Ser Glu Arg 95 Glu Pro Glu Pro Glu Lys Lys Lys Cys Tyr Leu Glu Arg His Ser Ile Thr His Ser Glu Val Lys Pro Phe Glu Cys Asp 11e Cys Gly Lys Ala Pro Ins Fro Pro Phe Glu Cys Asp 11e Cys Gly Lys Ala Pro Ins Fro Ins Gly Pro Ins Ins <td>Gln</td> <td>Ala</td> <td>Ser</td> <td>Ser</td> <td>Pro</td> <td>Pro</td> <td>Arg</td> <td>Pro</td> <td>Asn</td> <td>His</td> <td>Tyr</td> <td>Leu</td> <td>Leu</td> <td>Ile</td> <td>Asp</td> <td>Thr</td>	Gln	Ala	Ser	Ser	Pro	Pro	Arg	Pro	Asn	His	Tyr	Leu	Leu	Ile	Asp	Thr
Pro Gly Ala Ser Gly Ala Pro Gly Gln Lys Lys Lys Cys Tyr Ser Cys Pro 110 Cys Ris Ser 115 Ris Ser 115 Ris	65					70					75					80
Pro Gly Ala Ser Gly Ala Pro Gly Gln Lys Lys Lys Cys Tyr Ser Cys Pro 110 Cys Ris Ser 115 Ris Ser 115 Ris																
Pro Gly Ala Ser Gly Ala Pro Gly Gln Lys Lys Lys Cys Tyr Ser Cys Pro 110 Cys Ris Ser 115 Ris Ser 115 Ris	Gln	Gly	Val	Pro	Tyr	Thr	Val	Leu	Val	Asp	Glu	Glu	Ser	Gln	Arg	Glu
Pro Gly Ala Ser Gly Ala Pro Gly Gln Lys Lys Cys Tyr Ser Cys Pro 110 Cys Pro 110 Cys Ser Arg 115 Cys Pro 110 Cys In 110 Cy		4			-					_					_	
Val Cys Ser 115 Arg Val Phe Glu Tyr 120 Met Ser Tyr Leu Gln Arg His Ser Ile Thr 115 Ser Glu Val Lys Pro Phe Glu Cys Asp 125 Fu His Ser Ile Thr 130 Ser Glu Val Lys Pro Phe Glu Cys Asp 140 Ile Cys Gly Lys Ala Phe 135 Pro Phe Glu Arg His Leu Asp 140 Ser Ile Lys Ile Lys<																
Val Cys Ser 115 Arg Val Phe Glu Tyr 120 Met Ser Tyr Leu Gln Arg His Ser Ile Thr 115 Ser Glu Val Lys Pro Phe Glu Cys Asp 125 Fu His Ser Ile Thr 130 Ser Glu Val Lys Pro Phe Glu Cys Asp 140 Ile Cys Gly Lys Ala Phe 135 Pro Phe Glu Arg His Leu Asp 140 Ser Ile Lys Ile Lys<	Pro	Glv	Δla	Ser	Glv	Δla	Pro	Glv	Gln	T.vs	T.vc	Cvs	ጥህጉ	Ser	Cvs	Pro
Val Cys Ser Arg Val Phe Glu Tyr Met Ser Tyr Leu Gln Arg His Ser Ile Thr His Ser Glu Val Lys 135 Pro Phe Glu Cys Asp Ile Cys Gly Lys 140 Phe 130 Phe 150 Phe 150 Phe 150 Phe 155 Pro Phe 160 Phe 160 Phe 165 Pro Phe	110	011			0 1 <i>1</i>			017		-10	2,0	0,0	-1-		0,0	
115 120 125 The Thr His Thr His Ser Glu Val Lys 135 Pro Phe Glu Cys Asp 11e Cys Gly Lys Gly Lys Ala Phe 130 Lys Arg Arg Ala Ser His 150 Leu Ala Ser His 155 Arg His His Ser His Ser His 160 Ser His 160 Ala Gly Gly Gly Arg 165 Pro 165 Pro 170 Pro 175 P				100					103					110		
115 120 125 The Thr His Thr His Ser Glu Val Lys 135 Pro Phe Glu Cys Asp 11e Cys Gly Lys Gly Lys Ala Phe 130 Lys Arg Arg Ala Ser His 150 Leu Ala Ser His 155 Arg His His Ser His Ser His 160 Ser His 160 Ala Gly Gly Gly Arg 165 Pro 165 Pro 170 Pro 175 P	Wa 1	Cvc	Sar	Ara	17 a 1	Dho	Glu	maz rr	Mo+	Sar	ጥ፣፣	Len	Gln	Ara	Hic	Sar
The The His Ser Glu Val Lys Pro Phe Glu Cys Asp 11e Cys Gly Lys Ala Phe 130 Ala Phe Lys Arg Ala Ser His Leu Ala Arg His His Ser Ile His Leu 160 Ala Gly Gly Arg Pro His Gly Cys Pro Leu Cys Pro Arg Arg Phe 175 Arg Asp Ala Gly Glu Leu Ala Gln His Ser Arg Val His Ser Gly Glu 190 Arg Pro Phe Gln Cys Pro His Cys Pro Arg Arg Phe Met Glu Gln Asn Leu Gln Leu Gln Lys His Thr Arg Trp Lys His Pro	vaı	Суз		Arg	vai	FIIC	GIU	_	rae c	Ser	TYT	пец		ALG	птэ	Der
Ala Phe 145 Lys Arg Ala Ser His 150 Leu Ala Arg His 155 His 160 Ala Gly Gly Gly Arg 165 Pro 165 His 150 Pro 175			113					120					123			
Ala Phe 145 Lys Arg Ala Ser His 150 Leu Ala Arg His 155 His 160 Ala Gly Gly Gly Arg 165 Pro 165 His 150 Pro 175	- 1-	m	77.2		G1	T7- 7	T	D	Db -	01. -	a	7	71 ~	O	<i>~</i> 1	T
Ala Phe Lys Arg Ala Ser His Leu Ala Arg His His Ser Ile His Leu 160 Ala Gly Gly Gly Arg 165 Pro His Gly Cys Pro Leu Cys Pro Arg Arg Phe 175 Arg Asp Ala Gly 180 Pro His Cys Pro His Cys Pro Arg Arg Phe 190 Pro Phe 195 Pro Phe 195 Pro His Cys Pro Arg Arg Phe 196 Pro Phe 195 Pro His Cys Pro Arg Pro Phe 195 Pro Pro Phe 195 Pro Phe 195 Pro Pro Phe 195 Pro Pro Phe 195 Pro Pro Phe 195 Pro	тте		птѕ	ser	GIU	vai		PIO	Pne	GIU	Cys		TTE	Cys	GIY	гуу
145		130					135					140				
145	_								_		•	•				
Ala Gly Gly Gly Arg Pro His Gly Cys Pro Leu Cys Pro Arg Arg Phe 175 Arg Asp Ala Gly Glu Leu Ala Gln His Ser Arg Val His Ser Gly Glu 190 Arg Pro Phe 185 Thr Leu Gln Lys His Thr Arg Trp Lys His Pro		Phe	Lys	Arg	Ala		Hıs	Leu	Ala	Arg		Hıs	Ser	Ile	His	
Arg Asp Ala Gly Glu Leu Ala Gln His Ser Arg Val His Ser Gly Glu 190 Arg Pro Phe Gln Cys Pro His Cys Pro Arg Arg Arg Phe Met Glu 200 Thr Leu Gln Lys His Thr Arg Trp Lys His Pro	145					150					155					160
Arg Asp Ala Gly Glu Leu Ala Gln His Ser Arg Val His Ser Gly Glu 190 Arg Pro Phe Gln Cys Pro His Cys Pro Arg Arg Arg Phe Met Glu 200 Thr Leu Gln Lys His Thr Arg Trp Lys His Pro																
Arg Pro Phe Gln Cys Pro His Cys Pro Lys His Pro Leu Gln Lys His Thr Arg Trp Lys His Pro	Ala	Gly	Gly	Gly	Arg	Pro	His	Gly	Cys	Pro	Leu	Cys	Pro	Arg	Arg	Phe
Arg Pro Phe Gln Cys Pro His Cys Pro Arg Arg Phe Met Glu Gln Asn 195 Thr Leu Gln Lys His Thr Arg Trp Lys His Pro					165					170					175	
Arg Pro Phe Gln Cys Pro His Cys Pro Arg Arg Phe Met Glu Gln Asn 195 Thr Leu Gln Lys His Thr Arg Trp Lys His Pro																
Arg Pro Phe Gln Cys Pro His Cys Pro Arg Arg Phe Met Glu Gln Asn 195 200 205 Thr Leu Gln Lys His Thr Arg Trp Lys His Pro	Arg	Asp	Ala	Gly	Glu	Leu	Ala	Gln	His	Ser	Arg	Val	His	Ser	Gly	Glu
195 200 205 Thr Leu Gln Lys His Thr Arg Trp Lys His Pro				180					185					190		
195 200 205 Thr Leu Gln Lys His Thr Arg Trp Lys His Pro																
195 200 205 Thr Leu Gln Lys His Thr Arg Trp Lys His Pro	Arq	Pro	Phe	Gln	Cys	Pro	His	Cys	Pro	Arq	Arg	Phe	Met	Glu	Gln	Asn
Thr Leu Gln Lys His Thr Arg Trp Lys His Pro	,				••			-		-	_					
	Thr	Leu	Gln	Lys	His	Thr	Ara	Tro	Lys	His	Pro					
4 ± V		210		•			215		-							

PCT/US00/05882

<210> 1381 <211> 275 <212> PRT <213> Homo sapiens <400> 1381 Gly Val Ala Leu Phe Lys Ser Ala Ala Gly Asp Gln Pro Thr Ala Ala 10 Cys Ile Cys Ile Gln Arg Gln Val Pro Pro Val Pro Ala Ala Arg Ala 25 Pro Gln Ser Arg Thr Arg Ser Ala Gln Ala Lys Leu Ala Leu Thr Met 40 Pro Val Lys Gly Gly Thr Lys Cys Ile Lys Tyr Leu Leu Phe Gly Phe Asn Phe Ile Phe Trp Leu Ala Gly Ile Ala Val Leu Ala Ile Gly Leu 75 Trp Leu Arg Phe Asp Ser Gln Thr Lys Ser Ile Phe Glu Gln Glu Thr 85 90 Asn Asn Asn Ser Ser Phe Tyr Thr Gly Val Tyr Ile Leu Ile Gly 100 105 Ala Gly Ala Leu Met Met Leu Val Gly Phe Leu Gly Cys Cys Gly Ala 120 Val Gln Glu Ser Gln Cys Met Leu Gly Leu Phe Phe Gly Phe Leu Leu 130 Val Ile Phe Ala Ile Glu Ile Ala Ala Ile Trp Gly Tyr Ser His 145 150 155 Lys Asp Glu Val Ile Lys Glu Val Gln Glu Phe Tyr Lys Asp Thr Tyr 165 170 Asn Lys Leu Lys Thr Lys Asp Glu Pro Gln Arg Glu Thr Leu Lys Ala 180 Ile His Tyr Ala Leu Asn Cys Cys Gly Leu Ala Gly Gly Val Glu Gln 195 Phe Ile Ser Asp Ile Cys Pro Lys Lys Asp Val Leu Glu Thr Phe Thr 215

1441

Val Lys Ser Cys Pro Asp Ala Ile Lys Glu Val Phe Asp Asn Lys Phe 230 His Ile Ile Gly Ala Val Gly Ile Gly Ile Ala Val Val Met Ile Phe 245 250 Gly Met Ile Phe Ser Met Ile Leu Cys Cys Ala Ile Arg Arg Asn Arg 260 265 Glu Met Val 275 <210> 1382 <211> 766 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (13) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (17) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (123) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1382 Pro Cys Trp Glu Leu Val Gly Pro Pro Gly Trp Gln Xaa Ile Arg Ala 5 10 15 Xaa Pro Ala Thr Val His Arg Ala Glu Ile Leu Ser Phe Pro Arg Ser 20 25 Lys Thr Ser Glu Pro Ala Lys Arg Gly Arg Thr Ala Ser Ala Ala Met Ala Leu Lys Asp Tyr Ala Leu Glu Lys Glu Lys Val Lys Lys Phe Leu 50 55 60 Gln Glu Phe Tyr Gln Asp Asp Glu Leu Gly Lys Lys Gln Phe Lys Tyr 65 70 75

Gly Asn Gln Leu Val Arg Leu Ala His Arg Glu Gln Val Ala Leu Tyr

				85					90					95	
Val	Asp	Leu	Asp 100	Asp	Val	Ala	Glu	Asp 105	Asp	Pro	Glu	Leu	Val 110	Asp	Ser
Ile	Cys	Glu 115	Asn	Ala	Arg	Arg	Tyr 120	Ala	Lys	Xaa	Phe	Ala 125	Asp	Ala	Va]
Gln	Glu 130	Leu	Leu	Pro	Gln	туr 135	Lys	Glu	Arg	Glu	Val 140	Val	Asn	Lys	Asp
Val 145	Leu	Asp	Val	Tyr	Ile 150	Glu	His	Arg	Leu	Met 155	Met	Glu	Gln	Arg	Ser 160
Arg	Asp	Pro	Gly	Met 165	Val	Arg	Ser	Pro	Gln 170	Asn	Gln	Tyr	Pro	Ala 175	Glu
Leu	Met	Arg	Arg 180	Phe	Glu	Leu	Tyr	Phe 185	Gln	Gly	Pro	Ser	Ser 190	Asn	Lys
Pro	Arg	Val 195	Ile	Arg	Glu	Val	Arg 200	Ala	Asp	Ser	Val	Gly 205	Lys	Leu	Va]
Thr	Val 210	Arg	Gly	Ile	Val	Thr 215	Arg	Val	Ser	Glu	Val 220	Lys	Pro	Lys	Met
Val 225	Val	Ala	Thr	Tyr	Thr 230	Cys	Asp	Gln	Cys	Gly 235	Ala	Glu	Thr	Tyr	Glr 240
Pro	Ile	Gln	Ser	Pro 245	Thr	Phe	Met	Pro	Leu 250	Ile	Met	Cys	Pro	Ser 255	Glr
Glu	Cys	Gln	Thr 260	Asn	Arg	Ser	Gly	Gly 265	Arg	Leu	Tyr	Leu	Gln 270	Thr	Arç
Gly	Ser	Arg 275	Phe	Ile	Lys	Phe	Gln 280	Glu	Met	Lys	Met	Gln 285	Glu	His	Ser
Asp	Gln 290	Val	Pro	Val	Gly	Asn 295	Ile	Pro	Arg	Ser	Ile 300	Thr	Val	Leu	Va]
Glu 305	Gly	Glu	Asn	Thr	Arg 310	Ile	Ala	Gln	Pro	Gly 315	Asp	His	Val	Ser	Va]
Thr	Gly	Ile	Phe	Leu 325	Pro	Ile	Leu	Arg	Thr 330	Gly	Phe	Arg	Gln	Val 335	Va]
Gln	Gly	Leu	Leu 340	Ser	Glu	Thr	Tyr	Leu 345	Glu	Ala	His	Arg	Ile 350	Val	Lys
Mo+	λου	Luc	Sar	Clu	λακ	Ner	Glu	Sar	Gly	Δ1 =	G1 17	Glu	T.e.ii	Thr	Δτο

Glu Glu Leu Arg Gln Ile Ala Glu Glu Asp Phe Tyr Glu Lys Leu Ala Ala Ser Ile Ala Pro Glu Ile Tyr Gly His Glu Asp Val Lys Lys Ala Leu Leu Leu Leu Val Gly Gly Val Asp Gln Ser Pro Arg Gly Met Lys Ile Arg Gly Asn Ile Asn Ile Cys Leu Met Gly Asp Pro Gly Val Ala Lys Ser Gln Leu Leu Ser Tyr Ile Asp Arg Leu Ala Pro Arg Ser Gln Tyr Thr Thr Gly Arg Gly Ser Ser Gly Val Gly Leu Thr Ala Ala Val Leu Arg Asp Ser Val Ser Gly Glu Leu Thr Leu Glu Gly Gly Ala Leu Val Leu Ala Asp Gln Gly Val Cys Cys Ile Asp Glu Phe Asp Lys Met Ala Glu Ala Asp Arg Thr Ala Ile His Glu Val Met Glu Gln Gln Thr Ile Ser Ile Ala Lys Ala Gly Ile Leu Thr Thr Leu Asn Ala Arg Cys Ser Ile Leu Ala Ala Ala Asn Pro Ala Tyr Gly Arg Tyr Asn Pro Arg Arg Ser Leu Glu Gln Asn Ile Gln Leu Pro Ala Ala Leu Leu Ser Arg Phe Asp Leu Leu Trp Leu Ile Gln Asp Arg Pro Asp Arg Asp Asn Asp Leu Arg Leu Ala Gln His Ile Thr Tyr Val His Gln His Ser Arg Gln Pro Pro Ser Gln Phe Glu Pro Leu Asp Met Lys Leu Met Arg Arg Tyr Ile Ala Met Cys Arg Glu Lys Gln Pro Met Val Pro Glu Ser Leu Ala Asp Tyr Ile Thr Ala Ala Tyr Val Glu Met Arg Arg Glu Ala Trp

1444

635 625 630 640 Ala Ser Lys Asp Ala Thr Tyr Thr Ser Ala Arg Thr Leu Leu Ala Ile 645 650 Leu Arg Leu Ser Thr Ala Leu Ala Arg Leu Arg Met Val Asp Val Val 665 Glu Lys Glu Asp Val Asn Glu Ala Ile Arg Leu Met Glu Met Ser Lys Asp Ser Leu Leu Gly Asp Lys Gly Gln Thr Ala Arg Thr Gln Arg Pro 695 Ala Asp Val Ile Phe Ala Thr Val Arg Glu Leu Val Ser Gly Gly Arg 710 715 Ser Val Arg Phe Ser Glu Ala Glu Gln Arg Cys Val Ser Arg Gly Phe 725 730 Thr Pro Ala Gln Phe Gln Ala Ala Leu Asp Glu Tyr Glu Glu Leu Asn 740 745 Val Trp Gln Val Asn Ala Ser Arg Thr Arg Ile Thr Phe Val 755 760 <210> 1383 <211> 296 <212> PRT <213> Homo sapiens <400> 1383 Phe Arg Pro Gly Ser Pro Arg Gln Pro Arg Ala Gln Pro Ile Ser Ala Pro Asp Cys Thr Arg Ala Met Val Gly Arg Arg Ala Leu Ile Val Leu 25 Ala His Ser Glu Arg Thr Ser Phe Asn Tyr Ala Met Lys Glu Ala Ala 35 40 45 Ala Ala Leu Lys Lys Lys Gly Trp Glu Val Val Glu Ser Asp Leu Tyr Ala Met Asn Phe Asn Pro Ile Ile Ser Arg Lys Asp Ile Thr Gly Lys Leu Lys Asp Pro Ala Asn Phe Gln Tyr Pro Ala Glu Ser Val Leu 90

Ala Tyr Lys Glu Gly His Leu Ser Pro Asp Ile Val Ala Glu Gln Lys 100 105 Lys Leu Glu Ala Ala Asp Leu Val Ile Phe Gln Phe Pro Leu Gln Trp 115 120 Phe Gly Val Pro Ala Ile Leu Lys Gly Trp Phe Glu Arg Val Phe Ile 135 Gly Glu Phe Ala Tyr Thr Tyr Ala Ala Met Tyr Asp Lys Gly Pro Phe 150 155 Arg Ser Lys Lys Ala Val Leu Ser Ile Thr Thr Gly Gly Ser Gly Ser 165 170 Met Tyr Ser Leu Gln Gly Ile His Gly Asp Met Asn Val Ile Leu Trp 185 Pro Ile Gln Ser Gly Ile Leu His Phe Cys Gly Phe Gln Val Leu Glu 200 Pro Gln Leu Thr Tyr Ser Ile Gly His Thr Pro Ala Asp Ala Arg Ile Gln Ile Leu Glu Gly Trp Lys Lys Arg Leu Glu Asn Ile Trp Asp Glu 235 230 Thr Pro Leu Tyr Phe Ala Pro Ser Ser Leu Phe Asp Leu Asn Phe Gln 245 250 Ala Gly Phe Leu Met Lys Lys Glu Val Gln Asp Glu Glu Lys Asn Lys 260 265 Lys Phe Gly Leu Ser Val Gly His His Leu Gly Lys Ser Ile Pro Thr Asp Asn Gln Ile Lys Ala Arg Lys

<210> 1384

<211> 165

<212> PRT

<213> Homo sapiens

<400> 1384

Asp Pro Arg Thr Met Asn Leu Ala Ile Ser Ile Ala Leu Leu Leu Thr
1 5 10 15

1446

Val Leu Gln Val Ser Arg Gly Gln Lys Val Thr Ser Leu Thr Ala Cys 25 Leu Val Asp Gln Ser Leu Arg Leu Asp Cys Arg His Glu Asn Thr Ser 40 Ser Ser Pro Ile Gln Tyr Glu Phe Ser Leu Thr Arg Glu Thr Lys Lys 55 His Val Leu Phe Gly Thr Val Gly Val Pro Glu His Thr Tyr Arg Ser Arg Thr Asn Phe Thr Ser Lys Tyr Asn Met Lys Val Leu Tyr Leu Ser 85 90 Ala Phe Thr Ser Lys Asp Glu Gly Thr Tyr Thr Cys Ala Leu His His 100 105 Ser Gly His Ser Pro Pro Ile Ser Ser Gln Asn Val Thr Val Leu Arg 120 Asp Lys Leu Val Lys Cys Glu Gly Ile Ser Leu Leu Ala Gln Asn Thr 135 Ser Trp Leu Leu Leu Leu Leu Ser Leu Ser Leu Gln Ala Thr 145 150 155 Asp Phe Met Ser Leu 165 <210> 1385 <211> 399 <212> PRT <213> Homo sapiens <400> 1385 His Glu Arg Thr Pro Ser Arg Pro Gln Pro Asp Thr Pro Arg Gly Pro Pro Val Ser Arg Gly Cys Ser Pro Arg His Gly Thr Gly Pro Arg Leu 25

Pro Val Ser Arg Gly Cys Ser Pro Arg His Gly Thr Gly Pro Arg Leu 25

Thr Met Ala Ala Ala Arg His Ser Thr Leu Asp Phe Met Leu Gly Ala 35

Lys Ala Asp Gly Glu Thr Ile Leu Lys Gly Leu Gln Ser Ile Phe Gln 55

Glu Gln Gly Met Ala Glu Ser Val His Thr Trp Gln Asp His Gly Tyr

Leu Ala Thr Tyr Thr Asn Lys Asn Gly Ser Phe Ala Asn Leu Arg Ile Tyr Pro His Gly Leu Val Leu Leu Asp Leu Gln Ser Tyr Asp Gly Asp Ala Gln Gly Lys Glu Glu Ile Asp Ser Ile Leu Asn Lys Val Glu Glu Arg Met Lys Glu Leu Ser Gln Asp Ser Thr Gly Arg Val Lys Arg Leu Pro Pro Ile Val Arg Gly Gly Ala Ile Asp Arg Tyr Trp Pro Thr Ala Asp Gly Arg Leu Val Glu Tyr Asp Ile Asp Glu Val Val Tyr Asp Glu Asp Ser Pro Tyr Gln Asn Ile Lys Ile Leu His Ser Lys Gln Phe Gly Asn Ile Leu Ile Leu Ser Gly Asp Val Asn Leu Ala Glu Ser Asp Leu Ala Tyr Thr Arg Ala Ile Met Gly Ser Gly Lys Glu Asp Tyr Thr Gly Lys Asp Val Leu Ile Leu Gly Gly Gly Asp Gly Ile Leu Cys Glu Ile Val Lys Leu Lys Pro Lys Met Val Thr Met Val Glu Ile Asp Gln Met Val Ile Asp Gly Cys Lys Lys Tyr Met Arg Lys Thr Cys Gly Asp Val Leu Asp Asn Leu Lys Gly Asp Cys Tyr Gln Val Leu Ile Glu Asp Cys Ile Pro Val Leu Lys Arg Tyr Ala Lys Glu Gly Arg Glu Phe Asp Tyr Val Ile Asn Asp Leu Thr Ala Val Pro Ile Ser Thr Ser Pro Glu Glu Asp Ser Thr Trp Glu Phe Leu Arg Leu Ile Leu Asp Leu Ser Met Lys Val Leu Lys Gln Asp Gly Lys Tyr Phe Thr Gln Gly Asn Cys Val

1448

345 350 340 Asn Leu Thr Glu Ala Leu Ser Leu Tyr Glu Glu Gln Leu Gly Arg Leu 355 360 Tyr Cys Pro Val Glu Phe Ser Lys Glu Ile Val Cys Val Pro Ser Tyr 375 380 Leu Glu Leu Trp Val Phe Tyr Thr Val Trp Lys Lys Ala Lys Pro 390 395 <210> 1386 <211> 287 <212> PRT <213> Homo sapiens <400> 1386 Phe Asp Cys Arg Asp Val Ala Phe Thr Val Gly Glu Gly Glu Asp His Asp Ile Pro Ile Gly Ile Asp Lys Ala Leu Glu Lys Met Gln Arg Glu 20 Glu Gln Cys Ile Leu Tyr Leu Gly Pro Arg Tyr Gly Phe Gly Glu Ala 40 Gly Lys Pro Lys Phe Gly Ile Glu Pro Asn Ala Glu Leu Ile Tyr Glu Val Thr Leu Lys Ser Phe Glu Lys Ala Lys Glu Ser Trp Glu Met Asp 70 Thr Lys Glu Lys Leu Glu Gln Ala Ala Ile Val Lys Glu Lys Gly Thr Val Tyr Phe Lys Gly Gly Lys Tyr Met Gln Ala Val Ile Gln Tyr Gly 100 105 Lys Ile Val Ser Trp Leu Glu Met Glu Tyr Gly Leu Ser Glu Lys Glu 115 120 125 Ser Lys Ala Ser Glu Ser Phe Leu Leu Ala Ala Phe Leu Asn Leu Ala Met Cys Tyr Leu Lys Leu Arg Glu Tyr Thr Lys Ala Val Glu Cys Cys 150 155 Asp Lys Ala Leu Gly Leu Asp Ser Ala Asn Glu Lys Gly Leu Tyr Arg

170

175

Arg Gly Glu Ala Gln Leu Leu Met Asn Glu Phe Glu Ser Ala Lys Gly
180 185 190

Asp Phe Glu Lys Val Leu Glu Val Asn Pro Gln Asn Lys Ala Ala Arg 195 200 205

Leu Gln Ile Ser Met Cys Gln Lys Lys Ala Lys Glu His Asn Glu Arg 210 215 220

Asp Arg Arg Tyr Thr Pro Thr Cys Ser Arg Ser Leu Gln Ser Arg Met 225 230 235 240

Pro Arg Lys Arg Pro Ile Lys Gln Trp Ala Arg Arg Leu Gln Lys Gly 245 250 255

Ser Leu Met Lys Lys Glu Gln Thr Val Lys Gln Trp Lys Lys Arg Asn 260 265 270

Leu Arg Ala Thr Tyr Asp Ala Thr Pro Arg Arg Glu Glu Ser Gln
275 280 285

<210> 1387

<211> 206

<212> PRT

<213> Homo sapiens

<400> 1387

Arg Leu Pro Ile Arg Gln Ser Ala Ala Asp Gly Leu Arg Ala Arg Pro
1 5 10 15

Leu Gly Ser Asn Thr Ala Pro Ala Leu Arg Val Met Val Gln Ala Trp \$20\$ \$25\$ 30

Tyr Met Asp Asp Ala Pro Gly Asp Pro Arg Gln Pro His Arg Pro Asp 35 40 45

Pro Gly Arg Pro Val Gly Leu Glu Gln Leu Arg Arg Leu Gly Val Leu 50 55 60

Tyr Trp Lys Leu Asp Ala Asp Lys Tyr Glu Asn Asp Pro Glu Leu Glu 65 70 75 80

Lys Ile Arg Arg Glu Arg Asn Tyr Ser Trp Met Asp Ile Ile Thr Ile 85 90 95

Cys Lys Asp Lys Leu Pro Asn Tyr Glu Glu Lys Ile Lys Met Phe Tyr 100 105 110

1450

Glu Glu His Leu His Leu Asp Asp Glu Ile Arg Tyr Ile Leu Asp Gly
115 120 125

Ser Gly Tyr Phe Asp Val Arg Asp Lys Glu Asp Gln Trp Ile Arg Ile 130 135 140

Phe Met Glu Lys Gly Asp Met Val Thr Leu Pro Ala Gly Ile Tyr His 145 150 155 160

Arg Phe Thr Val Asp Glu Lys Asn Tyr Thr Lys Ala Met Arg Leu Phe 165 170 175

Val Gly Glu Pro Val Trp Thr Ala Tyr Asn Arg Pro Ala Asp His Phe 180 185 190

Glu Ala Arg Gly Gln Tyr Val Lys Phe Leu Ala Gln Thr Ala 195 200 205

<210> 1388

<211> 394

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1388

Phe His Xaa Ala Ala His Tyr Ser Leu Pro Asp Gly Arg His Gly Arg

1 5 10 15

Leu Asp Ser Pro Thr Phe His Leu Thr Leu His Tyr Pro Thr Glu His
20 25 30

Val Gln Phe Trp Val Gly Ser Pro Ser Thr Pro Ala Gly Trp Val Arg
35 40 45

Glu Gly Asp Thr Val Gln Leu Leu Cys Arg Gly Asp Gly Ser Pro Ser 50 55 60

Pro Glu Tyr Thr Leu Phe Arg Leu Gln Asp Glu Gln Glu Val Leu
65 70 75 80

Asn Val Asn Leu Glu Gly Asn Leu Thr Leu Glu Gly Val Thr Arg Gly 85 90 95

Gln Ser Gly Thr Tyr Gly Cys Arg Val Glu Asp Tyr Asp Ala Ala Asp 100 105 110

Asp	Val	Gln 115	Leu	Ser	Lys	Thr	Leu 120	Glu	Leu	Arg	Val	Ala 125	Tyr	Leu	Asp
Pro	Leu 130	Glu	Leu	Ser	Glu	Gly 135	Lys	Val	Leu	Ser	Leu 140	Pro	Leu	Asn	Ser
Ser 145	Ala	Val	Val	Asn	Cys 150	Ser	Val	His	Gly	Leu 155	Pro	Thr	Pro	Ala	Leu 160
Arg	Trp	Thr	Lys	Asp 165	Ser	Thr	Pro	Leu	Gly 170	Asp	Gly	Pro	Met	Leu 175	Ser
Leu	Ser	Ser	Ile 180	Thr	Phe	Asp	Ser	Asn 185	Gly	Thr	Tyr	Val	Cys 190	Glu	Ala
Ser	Leu	Pro 195	Thr	Val	Pro	Val	Leu 200	Ser	Arg	Thr	Gln	Asn 205	Phe	Thr	Leu
Leu	Val 210	Gln	Gly	Ser	Pro	Glu 215	Leu	Lys	Thr	Ala	Glu 220	Ile	Glu	Pro	Lys
Ala 225	Asp	Gly	Ser	Trp	Arg 230	Glu	Gly	Asp	Glu	Val 235	Thr	Leu	Ile	Cys	Ser 240
Ala	Arg	Gly	His	Pro 245	Asp	Pro	Lys	Leu	Ser 250	Trp	Ser	Gln	Leu	Gly 255	Gly
Ser	Pro	Ala	Glu 260	Pro	Ile	Pro	Gly	Arg 265	Gln	Gly	Trp	Val	Ser 270	Ser	Ser
Leu	Thr	Leu 275	Lys	Val	Thr	Ser	Ala 280	Leu	Ser	Arg	Asp	Gly 285	Ile	Ser	Cys
Glu	Ala 290	Ser	Asn	Pro	His	Gly 295	Asn	Lys	Arg	His	Val 300	Phe	His	Phe	Gly
Thr 305	Val	Ser	Pro	Gln	Thr 310	Ser	Gln	Ala	Gly	Val 315	Ala	Val	Met	Ala	Val 320
Ala	Val	Ser	Val	Gly 325	Leu	Leu	Leu	Leu	Val 330	Val	Ala	Val	Phe	Tyr 335	Cys
Val	Arg	Arg	Lys 340	Gly	Gly	Pro	Cys	Cys 345	Arg	Gln	Arg	Arg	Glu 350	Lys	Gly
Ala	Pro	Pro 355	Pro	Gly	Glu	Pro	Gly 360	Leu	Ser	His	Ser	Gly 365	Ser	Glu	Gln
Pro	Glu 370	Gln	Thr	Gly	Leu	Leu 375	Met	Gly	Gly	Ala	Ser 380	Gly	Gly	Ala	Arg

Gly Gly Ser Gly Gly Phe Gly Asp Glu Cys

390

WO 00/55350

385

145

1452

<210> 1389 <211> 264 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (16) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1389 Val Gly Cys Arg Trp Ser Arg Val Gly Pro Gln Asn Pro Arg Val Xaa 5 Leu Pro Pro Pro Thr Leu Ala Met Phe Leu Thr Arg Ser Glu Tyr Asp 20 25 Arg Gly Val Asn Thr Phe Ser Pro Glu Gly Arg Leu Phe Gln Val Glu 40 Tyr Ala Ile Glu Ala Ile Lys Leu Gly Ser Thr Ala Ile Gly Ile Gln 50 55 Thr Ser Glu Gly Val Cys Leu Ala Val Glu Lys Arg Ile Thr Ser Pro Leu Met Glu Pro Ser Ser Ile Glu Lys Ile Val Glu Ile Asp Ala His 90 Ile Gly Cys Ala Met Ser Gly Leu Ile Ala Asp Ala Lys Thr Leu Ile 100 105 110 Asp Lys Ala Arg Val Glu Thr Gln Asn His Trp Phe Thr Tyr Asn Glu 115 120

Phe His Met Asp Pro Ser Gly Thr Phe Val Gln Cys Asp Ala Arg Ala

Thr Met Thr Val Glu Ser Val Thr Gln Ala Val Ser Asn Leu Ala Leu

Gln Phe Gly Glu Glu Asp Ala Asp Pro Gly Ala Met Ser Arg Pro Phe

Gly Val Ala Leu Leu Phe Gly Gly Val Asp Glu Lys Gly Pro Gln Leu

170

135

150

1453

180 190 185 Ile Gly Ser Ala Ser Glu Gly Ala Gln Ser Ser Leu Gln Glu Val Tyr 195 200 205 His Lys Ser Met Thr Leu Lys Glu Ala Ile Lys Ser Ser Leu Ile Ile 215 Leu Lys Gln Val Met Glu Glu Lys Leu Asn Ala Thr Asn Ile Glu Leu 230 235 Ala Thr Val Gln Pro Gly Gln Asn Phe His Met Phe Thr Lys Glu Glu 245 250 Leu Glu Glu Val Ile Lys Asp Ile 260 <210> 1390 <211> 178 <212> PRT <213> Homo sapiens <400> 1390 Gln Lys Leu Glu Leu His Arg Gly Gly Gly Arg Ser Arg Thr Ser Gly 1.0 Ser Pro Gly Leu Phe Gly Leu Ser Ala Arg Arg Leu Leu Ala Ala Ala 25 Ala Thr Arg Gly Leu Pro Ala Ala Arg Val Arg Trp Glu Ser Ser Phe 35 40 Ser Arg Thr Val Val Ala Pro Ser Ala Val Ala Gly Lys Arg Pro Pro Glu Pro Thr Thr Pro Trp Gln Glu Asp Pro Glu Pro Glu Asp Glu Asn 70 75 Leu Tyr Glu Lys Asn Pro Asp Ser His Gly Tyr Asp Lys Asp Pro Val 90 85 Leu Asp Val Trp Asn Met Arg Leu Val Phe Phe Gly Val Ser Ile 105 Ile Leu Val Leu Gly Ser Thr Phe Val Ala Tyr Leu Pro Asp Tyr Arg

Cys Thr Gly Cys Pro Arg Ala Trp Asp Gly Met Lys Glu Trp Ser Arg

135

Arg Glu Ala Glu Arg Leu Val Lys Tyr Arg Glu Ala Asn Gly Leu Pro 145 150 155 160

Ile Met Glu Ser Asn Cys Phe Asp Pro Ser Lys Ile Gln Leu Pro Glu 165 170 175

Asp Glu

<210> 1391

<211> 133

<212> PRT

<213> Homo sapiens

<400> 1391

Val Ile Ile Thr Ser Ile Asn Gln Lys Ile Phe His Pro Leu Arg Ala 1 5 10 15

Leu Lys Leu Ser Thr Ser Ala Thr Phe Leu Ile Leu Val Leu Gly Gly 20 25 30

His Val Tyr Gly Leu Phe Asn Phe His Val Pro Tyr Cys Pro Leu Pro 35 40 45

Ala Val Ala Lys Ala Ser Cys Phe Ser Pro Thr Glu Glu Thr Val Leu 50 55 60

Cys His Asp Asp Arg Ala Leu Leu Gly Leu Val Phe Leu Val Phe Pro 65 70 75 80

Phe Trp Gln Cys Gly Leu Gln Glu Leu Asp Val Tyr Ala Gln Gly Ile 85 90 95

Glu Phe Thr Leu Lys Leu Gly Asn Gly Val Phe Asn Leu Cys Ser Cys 100 105 110

Leu Phe Ile Leu Leu Phe Ile Phe Cys His Pro Ala Leu Tyr Trp Ala 115 120 125

Asn Asn Glu Ile Lys 130

<210> 1392

<211> 401

<212> PRT

<213> Homo sapiens

<400)> 1	392													
Asn 1	Thr	Val	Leu	Lys 5	Lys	Met	Asp	Glu	Glu 10	Pro	Glu	Arg	Thr	Lys 15	Arg
Trp	Glu	Gly	Gly 20	Tyr	Glu	Arg	Thr	Trp 25	Glu	Ile	Leu	Lys	Glu 30	Asp	Glu
Ser	Gly	Ser 35	Leu	Lys	Ala	Thr	Ile 40	Glu	Asp	Ile	Leu	Phe 45	Lys	Ala	Lys
Arg	Lys 50	Arg	Val	Phe	Glu	His 55	His	Gly	Gln	Val	Arg 60	Leu	Gly	Met	Met
Arg 65	His	Leu	туr	Val	Val 70	Val	Asp	Gly	Ser	Arg 75	Thr	Met	Glu	Asp	Gln 80
Asp	Leu	Lys	Pro	Asn 85	Arg	Leu	Thr	Cys	Thr 90	Leu	Lys	Leu	Leu	Glu 95	Tyr
Phe	Val	Glu	Glu 100	Tyr	Phe	Asp	Gln	Asn 105	Pro	Ile	Ser	Gln	Ile 110	Gly	Ile
Ile	Val	Thr 115	Lys	Ser	Lys	Arg	Ala 120	Glu	Lys	Leu	Thr	Glu 125	Leu	Ser	Gly
Asn	Pro 130	Arg	Lys	His	Ile	Thr 135	Ser	Leu	Lys	Lys	Ala 140	Val	Asp	Met	Thr
Cys 145	His	Gly	Glu	Pro	Ser 150	Leu	Tyr	Asn	Ser	Leu 155	Ser	Ile	Ala	Met	Gln 160
Thr	Leu	Lys	His	Met 165	Pro	Gly	His	Thr	Ser 170	Arg	Glu	Val	Leu	Ile 175	Ile
Phe	Ser	Ser	Leu 180	Thr	Thr	Cys	Asp	Pro 185	Ser	Asn	Ile	Tyr	Asp 190	Leu	Ile
Lys	Thr	Leu 195	Lys	Ala	Ala	-	Ile 200	-	Val	Ser	Val	Ile 205	Gly	Leu	Ser
Ala	Glu 210	Val	Arg	Val	Cys	Thr 215	Val	Leu	Ala	Arg	Glu 220	Thr	Gly	Gly	Thr
Tyr 225	His	Val	Ile	Leu	Asp 230	Glu	Ser	His	Tyr	Lys 235	Glu	Leu	Leu	Thr	His 240
His	Val	Ser	Pro	Pro 245	Pro	Ala	Ser	Ser	Ser 250	Ser	Glu	Cys	Ser	Leu 255	Ile
Arg	Met	Gly	Phe	Pro	Gln	His	Thr	Ile	Ala	Ser	Leu	Ser	Asp	Gln	Asp

1456

260 265 270 Ala Lys Pro Ser Phe Ser Met Ala His Leu Asp Gly Asn Thr Glu Pro 280 Gly Leu Thr Leu Gly Gly Tyr Phe Cys Pro Gln Cys Arg Ala Lys Tyr 295 Cys Glu Leu Pro Val Glu Cys Lys Ile Cys Gly Leu Thr Leu Val Ser 310 315 Ala Pro His Leu Ala Arg Ser Tyr His His Leu Phe Pro Leu Asp Ala 325 330 Phe Gln Glu Ile Pro Leu Glu Glu Tyr Asn Gly Glu Arg Phe Cys Tyr Gly Cys Gln Gly Glu Leu Lys Asp Gln His Val Tyr Val Cys Ala Val 360 Cys Gln Asn Val Phe Cys Val Asp Cys Asp Val Phe Val His Asp Ser 370 375 Leu His Cys Cys Pro Gly Cys Ile His Lys Ile Pro Ala Pro Ser Gly 390 395 Val <210> 1393 <211> 318 <212> PRT <213> Homo sapiens <400> 1393 Pro Glu Gly Leu Pro Arg Phe Asn Asn Asn Phe Met Ala Pro Gly Ser Ala Ser Ser Pro Ser Pro Ser Phe Pro Ala Ser Arg Pro Trp Ala Ala 20 25 Val Gly Thr Met Ala Ala Ala Ala Ala Gly Pro Ser Pro Gly Ser

Gly Pro Gly Asp Ser Pro Glu Gly Pro Glu Gly Glu Ala Pro Glu Arg

Arg Arg Lys Ala His Gly Met Leu Lys Leu Tyr Tyr Gly Leu Ser Glu

75

55

70

Gly	Glu	Ala	Ala	Gly 85	Arg	Pro	Ala	Gly	Pro 90	Asp	Pro	Leu	Asp	Pro 95	Thr
Asp	Leu	Asn	Gly 100	Ala	His	Phe	Asp	Pro 105	Glu	Val	Tyr	Leu	Asp 110	Lys	Leu
Arg	Arg	Glu 115	Cys	Pro	Leu	Ala	Gln 120	Leu	Met	Asp	Ser	Glu 125	Thr	Asp	Met
Val	Arg 130	Gln	Ile	Arg	Ala	Leu 135	Asp	Ser	Asp	Met	Gln 140	Thr	Leu	Val	Tyr
Glu 145	Asn	Tyr	Asn	Lys	Phe 150	Ile	Ser	Ala	Thr	Asp 155	Thr	Ile	Arg	Lys	Met 160
Lys	Asn	Asp	Phe	Arg 165	Lys	Met	Glu	Asp	Glu 170	Met	Asp	Arg	Leu	Ala 175	Thr
Asn	Met	Ala	Val 180	Ile	Thr	Asp	Phe	Ser 185	Ala	Arg	Ile	Ser	Ala 190	Thr	Leu
Gln	Asp	Arg 195	His	Glu	Arg	Ile	Thr 200	Lys	Leu	Ala	Gly	Val 205	His	Ala	Leu
Leu	Arg 210	Lys	Leu	Gln	Phe	Leu 215	Phe	Glu	Leu	Pro	Ser 220	Arg	Leu	Thr	Lys
Cys 225	Val	Glu	Leu	Gly	Ala 230	Tyr	Gly	Gln	Ala	Val 235	Arg	Tyr	Gln	Gly	Arg 240
Ala	Gln	Ala	Val	Leu 245	Gln	Gln	Tyr	Gln	ніs 250	Leu	Pro	Ser	Phe	Arg 255	Ala
Ile	Gln	Asp	Asp 260	Cys	Gln	Val	Ile	Thr 265	Ala	Arg	Leu	Ala	Gln 270	Gln	Leu
Arg	Gln	Arg 275	Phe	Arg	Glu	Gly	Gly 280	Ser	Gly	Ala	Pro	Glu 285	Gln	Ala	Glu
Cys	Val 290	Glu	Leu	Leu	Leu	Ala 295	Leu	Gly	Glu	Pro	Ala 300	Glu	Glu	Leu	Cys
Glu 305	Glu	Phe	Trp	Arg	Thr 310	Pro	Ala	Ala	Gly	Trp 315	Arg	Arg	Ser		

<210> 1394

<211> 1285

<212> PRT

<213> Homo sapiens

<400> 1394 Phe Ser Phe Pro Leu Ser Ser Glu Pro Phe Gln Gly Ser Tyr Lys Val Val Val Gln Lys Lys Ser Gly Gly Arg Thr Glu His Pro Phe Thr Val 20 25 Glu Glu Phe Val Leu Pro Lys Phe Glu Val Gln Val Thr Val Pro Lys 40 Ile Ile Thr Ile Leu Glu Glu Glu Met Asn Val Ser Val Cys Gly Leu 55 Tyr Thr Tyr Gly Lys Pro Val Pro Gly His Val Thr Val Ser Ile Cys 65 70 75 Arg Lys Tyr Ser Asp Ala Ser Asp Cys His Gly Glu Asp Ser Gln Ala Phe Cys Glu Lys Phe Ser Gly Gln Leu Asn Ser His Gly Cys Phe Tyr 105 Gln Gln Val Lys Thr Lys Val Phe Gln Leu Lys Arg Lys Glu Tyr Glu 115 120 125 Met Lys Leu His Thr Glu Ala Gln Ile Gln Glu Glu Gly Thr Val Val 130 135 Glu Leu Thr Gly Arg Gln Ser Ser Glu Ile Thr Arg Thr Ile Thr Lys 150 155 Leu Ser Phe Val Lys Val Asp Ser His Phe Arg Gln Gly Ile Pro Phe Phe Gly Gln Val Arg Leu Val Asp Gly Lys Gly Val Pro Ile Pro Asn 180 185 Lys Val Ile Phe Ile Arg Gly Asn Glu Ala Asn Tyr Tyr Ser Asn Ala 200 Thr Thr Asp Glu His Gly Leu Val Gln Phe Ser Ile Asn Thr Thr Asn 210 215 Val Met Gly Thr Ser Leu Thr Val Arg Val Asn Tyr Lys Asp Arg Ser 225 235 Pro Cys Tyr Gly Tyr Gln Trp Val Ser Glu Glu His Glu Glu Ala His 245 250

His	Thr	Ala	Tyr 260	Leu	Val	Phe	Ser	Pro 265	Ser	Lys	Ser	Phe	Val 270	His	Leu
Glu	Pro	Met 275	Ser	His	Glu	Leu	Pro 280	Cys	Gly	His	Thr	Gln 285	Thr	Val	Gln
Ala	His 290	Tyr	Ile	Leu	Asn	Gly 295	Gly	Thr	Leu	Leu	Gly 300	Leu	Lys	Lys	Leu
Ser 305	Phe	Tyr	Tyr	Leu	Ile 310	Met	Ala	Lys	Gly	Gly 315	Ile	Val	Arg	Thr	Gly 320
Thr	His	Gly	Leu	Leu 325	Val	Lys	Gln	Glu	Asp 330	Met	Lys	Gly	His	Phe 335	Ser
Ile	Ser	Ile	Pro 340	Val	Lys	Ser	Asp	Ile 345	Ala	Pro	Val	Ala	Arg 350	Leu	Leu
Ile	Tyr	Ala 355	Val	Leu	Pro	Thr	Gly 360	Asp	Val	Ile	Gly	Asp 365	Ser	Ala	Lys
Tyr	Asp 370	Val	Glu	Asn	Cys	Leu 375	Ala	Asn	Lys	Val	Asp 380	Leu	Ser	Phe	Ser
Pro 385	Ser	Gln	Ser	Leu	Pro 390	Ala	Ser	His	Ala	His 395	Leu	Arg	Val	Thr	Ala 400
Ala	Pro	Gln	Ser	Val 405	Cys	Ala	Leu	Arg	Ala 410	Val	Asp	Gln	Ser	Val 415	Leu
Leu	Met	Lys	Pro 420	Asp	Ala	Glu	Leu	Ser 425	Ala	Ser	Ser	Val	Tyr 430	Asn	Leu
Leu	Pro	Glu 435	Lys	Asp	Leu	Thr	Gly 440	Phe	Pro	Gly	Pro	Leu 445	Asn	Asp	Gln
Asp	Asp 450	Glu	Asp	Cys	Ile	Asn 455	Arg	His	Asn	Val	Tyr 460	Ile	Asn	Gly	Ile
Thr 465	Tyr	Thr	Pro	Val	Ser 470	Ser	Thr	Asn	Glu	Lys 475	Asp	Met	Tyr	Ser	Phe 480
Leu	Glu	Asp	Met	Gly 485	Leu	Lys	Ala	Phe	Thr 490	Asn	Ser	Lys	Ile	Arg 495	Lys
Pro	Lys	Met	Cys 500	Pro	Gln	Leu	Gln	Gln 505	Tyr	Glu	Met	His	Gly 510	Pro	Glu
Gly	Leu	Arg 515	Val	Gly	Phe	Tyr	Glu 520	Ser	Asp	Val	Met	Gly 525	Arg	Gly	His

Ата	530	Leu	vaı	Hls	vai	535	GIU	Pro	HIS	Thr	540	Thr	vai	Arg	гуѕ
Туг 545	Phe	Pro	Glu	Thr	Trp 550	Ile	Trp	Asp	Leu	Val 555	Val	Val	Asn	Ser	Ala 560
Gly	Val	Ala	Glu	Val 565	Gly	Val	Thr	Val	Pro 570	Asp	Thr	Ile	Thr	Glu 575	Tr
Lys	Ala	Gly	Ala 580	Phe	Cys	Leu	Ser	Glu 585	Asp	Ala	Gly	Leu	Gly 590	Ile	Ser
Ser	Thr	Ala 595	Ser	Leu	Arg	Ala	Phe 600	Gln	Pro	Phe	Phe	Val 605	Glu	Leu	Thi
Met	Pro 610	Tyr	Ser	Val	Ile	Arg 615	Gly	Glu	Ala	Phe	Thr 620	Leu	Lys	Ala	Thr
Val 625	Leu	Asn	Tyr	Leu	Pro 630	Lys	Cys	Ile	Arg	Val 635	Ser	Val	Gln	Leu	Glu 640
Ala	Ser	Pro	Ala	Phe 645	Leu	Ala	Val	Pro	Val 650	Glu	Lys	Glu	Gln	Ala 655	Pro
His	Cys	Ile	Cys 660	Ala	Asn	Gly	Arg	Gln 665	Thr	Val	Ser	Trp	Ala 670	Val	Thr
Pro	Lys	Ser 675	Leu	Gly	Asn	Val	Asn 680	Phe	Thr	Val	Ser	Ala 685	Glu	Ala	Let
Glu	Ser 690	Gln	Glu	Leu	Cys	Gly 695	Thr	Glu	Val	Pro	Ser 700	Val	Pro	Glu	His
Gly 705	Arg	Lys	Asp	Thr	Val 710	Ile	Lys	Pro	Leu	Leu 715	Val	Glu	Pro	Glu	Gly 720
Leu	Glu	Lys	Glu	Thr 725	Thr	Phe	Asn	Ser	Leu 730	Leu	Cys	Pro	Ser	Gly 735	Gly
Glu	Val	Ser	Glu 740	Glu	Leu	Ser	Leu	Lys 745	Leu	Pro	Pro	Asn	Val 750	Val	Glu
Glu	Ser	Ala 755	Arg	Ala	Ser	Val	Ser 760	Val	Leu	Gly	Asp	Ile 765	Leu	Gly	Ser
Ala	Met 770	Gln	Asn	Thr	Gln	Asn 775	Leu	Leu	Gln	Met	Pro 780	Tyr	Gly	Cys	Gly
Glu 785	Gln	Asn	Met	Val	Leu 790	Phe	Ala	Pro	Asn	Ile 795	Tyr	Val	Leu	Asp	Туг 800

Leu	Asn	Glu	Thr	Gln 805	Gln	Leu	Thr	Pro	Glu 810	Ile	Lys	Ser	Lys	Ala 815	Ile
Gly	Tyr	Leu	Asn 820	Thr	Gly	Tyr	Gln	Arg 825	Gln	Leu	Asn	Tyr	Lys 830	His	Tyr
Asp	Gly	Ser 835	Tyr	Ser	Thr	Phe	Gly 840	Glu	Arg	Tyr	Gly	Arg 845	Asn	Gln	Gly
Asn	Thr 850	Trp	Leu	Thr	Ala	Phe 855	Val	Leu	Lys	Thr	Phe 860	Ala	Gln	Ala	Arg
Ala 865	Tyr	Ile	Phe	Ile	Asp 870	Glu	Ala	His	Ile	Thr 875	Gln	Ala	Leu	Ile	Trp 880
Leu	Ser	Gln	Arg	Gln 885	Lys	Asp	Asn	Gly	Cys 890	Phe	Arg	Ser	Ser	Gly 895	Ser
Leu	Leu	Asn	Asn 900	Ala	Ile	Lys	Gly	Gly 905	Val	Glu	Asp	Glu	Val 910	Thr	Leu
Ser	Ala	Туг 915	Ile	Thr	Ile	Ala	Leu 920	Leu	Glu	Ile	Pro	Leu 925	Thr	Val	Thr
His	Pro 930	Val	Val	Arg	Asn	Ala 935	Leu	Phe	Cys	Leu	Glu 940	Ser	Ala	Trp	Lys
Thr 945	Ala	Gln	Glu	Gly	Asp 950	His	Gly	Ser	His	Val 955	Tyr	Thr	Lys	Ala	Leu 960
Leu	Ala	Tyr	Ala	Phe 965	Ala	Leu	Ala	Gly	Asn 970	Gln	Asp	Lys	Arg	Lys 975	Glu
Val	Leu	Lys	Ser 980	Leu	Asn	Glu	Glu	Ala 985	Val	Lys	Lys	Asp	Asn 990	Ser	Val
His	Trp	Glu 995	Arg	Pro	Gln	-	Pro .000	Lys	Ala	Pro		Gly .005	His	Phe	Tyr
	Pro .010	Gln	Ala	Pro		Ala 015	Glu	Val	Glu	Met 1	Thr .020	Ser	Tyr	Val	Leu
Leu 025	Ala	Tyr	Leu		Ala .030	Gln	Pro	Ala		Thr .035	Ser	Glu	Asp		Thr 040
Ser	Ala	Thr		Ile 045	Val	Lys	Trp		Thr .050	Lys	Gln	Gln		Ala 055	Gln
Gly	Gly		ser 060	Ser	Thr	Gln	-	Thr 065	Val	Val	Ala		His .070	Ala	Leu

1462

Ser Lys Tyr Gly Ala Ala Thr Phe Thr Arg Thr Gly Lys Ala Ala Gln 1075 1080 1085

Val Thr Ile Gln Ser Ser Gly Thr Phe Ser Ser Lys Phe Gln Val Asp 1090 1095 1100

Asn Asn Asn Arg Leu Leu Gln Gln Val Ser Leu Pro Glu Leu Pro 105 1110 1115 1120

Gly Glu Tyr Ser Met Lys Val Thr Gly Glu Gly Cys Val Tyr Leu Gln 1125 1130 1135

Thr Ser Leu Lys Tyr Asn Ile Leu Pro Glu Lys Glu Glu Phe Pro Phe 1140 1145 1150

Ala Leu Gly Val Gln Thr Leu Pro Gln Thr Cys Asp Glu Pro Lys Ala 1155 1160 1165

His Thr Ser Phe Gln Ile Ser Leu Ser Val Ser Tyr Thr Gly Ser Arg 1170 1175 1180

Ser Ala Ser Asn Met Ala Ile Val Asp Val Lys Met Val Ser Gly Phe 185 1190 1195 1200

Ile Pro Leu Lys Pro Thr Val Lys Met Leu Glu Arg Ser Asn His Val 1205 1210 1215

Ser Arg Thr Glu Val Ser Ser Asn His Val Leu Ile Tyr Leu Asp Lys 1220 1225 1230

Val Ser Asn Gln Thr Leu Ser Leu Phe Phe Thr Val Leu Gln Asp Val 1235 1240 1245

Pro Val Arg Asp Leu Lys Pro Ala Ile Val Lys Val Tyr Asp Tyr Tyr 1250 1255 1260

Glu Thr Asp Glu Phe Ala Ile Ala Glu Tyr Asn Ala Pro Cys Ser Lys 265 1270 1275 1280

Asp Leu Gly Asn Ala 1285

<210> 1395

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1395

Ile Thr Lys Asn Ile Tyr Ser Asp Leu Lys Asp Leu Ser Ala Lys Asn

1463

15 1 10 Gln Ser Ile Ser Cys Pro Ser Ile Ile Val His Ala Cys Leu Leu 20 Phe Thr Cys Ser Ser Ala Gln Thr Val Ser Asn Leu Gly Thr Pro Phe 40 Gly Ala Asp Lys Tyr Ser Ser Ala Phe Ser Pro Gln Ile Tyr Asn Asp 55 60 Phe Asn Ile Pro Lys Asn Ile Gly Ile Ser Glu 70 <210> 1396 <211> 920 <212> PRT <213> Homo sapiens <400> 1396 Arg Thr Arg Gly Ile His Gly Glu Met Arg Leu Phe Val Ser Asp Gly Val Pro Gly Cys Leu Pro Val Leu Ala Ala Gly Arg Ala Arg Gly Arg Ala Glu Val Leu Ile Ser Thr Val Gly Pro Glu Asp Cys Val Val 40 Pro Phe Leu Thr Arg Pro Lys Val Pro Val Leu Gln Leu Asp Ser Gly Asn Tyr Leu Phe Ser Thr Ser Ala Ile Cys Arg Tyr Phe Phe Leu Leu Ser Gly Trp Glu Gln Asp Asp Leu Thr Asn Gln Trp Leu Glu Trp Glu 90 Ala Thr Glu Leu Gln Pro Ala Leu Ser Ala Ala Leu Tyr Tyr Leu Val 100 Val Gln Gly Lys Lys Gly Glu Asp Val Leu Gly Ser Val Arg Arg Ala 115 120 Leu Thr His Ile Asp His Ser Leu Ser Arg Gln Asn Cys Pro Phe Leu 135 Ala Gly Glu Thr Glu Ser Leu Ala Asp Ile Val Leu Trp Gly Ala Leu 145 150 155

Tyr	Pro	Leu	Leu	Gln 165	Asp	Pro	Ala	Tyr	Leu 170	Pro	Glu	Glu	Leu	Ser 175	Ala
Leu	His	Ser	Trp 180	Phe	Gln	Thr	Leu	Ser 185	Thr	Gln	Glu	Pro	Cys 190	Gln	Arg
Ala	Ala	Glu 195	Thr	Val	Leu	Lys	Gln 200	Gln	Gly	Val	Leu	Ala 205	Leu	Arg	Pro
Tyr	Leu 210	Gln	Lys	Gln	Pro	Gln 215	Pro	Ser	Pro	Ala	Glu 220	Gly	Arg	Ala	Val
Thr 225	Asn	Glu	Pro	Glu	Glu 230	Glu	Glu	Leu	Ala	Thr 235	Leu	Ser	Glu	Glu	Glu 240
Ile	Ala	Met	Ala	Val 245	Thr	Ala	Trp	Glu	Lys 250	Gly	Leu	Glu	Ser	Leu 255	Pro
Pro	Leu	Arg	Pro 260	Gln	Gln	Asn	Pro	Val 265	Leu	Pro	Val	Ala	Gly 270	Glu	Arg
Asn	Val	Leu 275	Ile	Thr	Ser	Ala	Leu 280	Pro	Tyr	Val	Asn	Asn 285	Val	Pro	His
Leu	Gly 290	Asn	Ile	Ile	Gly	Cys 295	Val	Leu	Ser	Ala	Asp 300	Val	Phe	Ala	Arg
Tyr 305	Ser	Arg	Leu	Arg	Gln 310	Trp	Asn	Thr	Leu	Tyr 315	Leu	Cys	Gly	Thr	Asp 320
Glu	Tyr	Gly	Thr	Ala 325	Thr	Glu	Thr	Lys	Ala 330	Leu	Glu	Glu	Gly	Leu 335	Thr
Pro	Gln	Glu	Ile 340	Cys	Asp	Lys	Tyr	His 345	Ile	Ile	His	Ala	Asp 350	Ile	Tyr
Arg	Trp	Phe 355	Asn	Ile	Ser	Phe	Asp 360	Ile	Phe	Gly	Arg	Thr 365	Thr	Thr	Pro
Gln	Gln 370	Thr	Lys	Ile	Thr	Gln 375	Asp	Ile	Phe	Gln	Gln 380	Leu	Leu	Lys	Arg
Gly 385	Phe	Val	Leu	Gln	Asp 390	Thr	Val	Glu	Gln	Leu 395	Arg	Cys	Glu	His	Cys 400
Ala	Arg	Phe	Leu	Ala 405	Asp	Arg	Phe	Val	Glu 410	Gly	Val	Cys	Pro	Phe 415	Cys
Gly	Tyr	Glu	Glu 420	Ala	Arg	Gly	Asp	Gln 425	Cys	Asp	Lys	Cys	Gly 430	Lys	Leu

116	ASII	435	Val	GIU	Leu	гуѕ	440	PIO	GIN	Cys	гуѕ	445	cys	Arg	sei
Cys	Pro 450	Val	Val	Gln	Ser	Ser 455	Gln	His	Leu	Phe	Leu 460	Asp	Leu	Pro	Lys
Leu 465	Glu	Lys	Arg	Leu	Glu 470	Glu	Trp	Leu	Gly	Arg 475	Thr	Leu	Pro	Gly	Ser 480
Asp	Trp	Thr	Pro	Asn 485	Ala	Gln	Phe	Ile	Thr 490	Arg	Ser	Trp	Leu	Arg 495	Asp
Gly	Leu	Lys	Pro 500	Arg	Cys	Ile	Thr	Arg 505	Asp	Leu	Lys	Trp	Gly 510	Thr	Pro
Val	Pro	Leu 515	Glu	Gly	Phe	Glu	Asp 520	Lys	Val	Phe	Tyr	Val 525	Trp	Phe	Asp
Ala	Thr 530	Ile	Gly	Tyr	Leu	Ser 535	Ile	Thr	Ala	Asn	Tyr 540	Thr	Asp	Gln	Trp
Glu 545	Arg	Trp	Trp	Lys	Asn 550	Pro	Glu	Gln	Val	Asp 555	Leu	Tyr	Gln	Phe	Met 560
Ala	Lys	Asp	Asn	Val 565	Pro	Phe	His	Ser	Leu 570	Val	Phe	Pro	Cys	Ser 575	Ala
Leu	Gly	Ala	Glu 580	Asp	Asn	Tyr	Thr	Leu 585	Val	Ser	His	Leu	Ile 590	Ala	Thr
Glu	Tyr	Leu 595	Asn	Tyr	Glu	Asp	Gly 600	Lys	Phe	ser	Lys	Ser 605	Arg	Gly	Val
Gly	Val 610	Phe	Gly	Asp	Met	Ala 615	Gln	Asp	Thr	Gly	11e 620	Pro	Ala	Asp	Ile
Frp 625	Arg	Phe	Tyr	Leu	Leu 630	Tyr	Ile	Arg	Pro	Glu 635	Gly	Gln	Asp	Ser	Ala 640
Phe	Ser	Trp	Thr	Asp 645	Leu	Leu	Leu	Lys	Asn 650	Asn	Ser	Glu	Leu	Leu 655	Asn
Asn	Leu	Gly	Asn 660	Phe	Ile	Asn	Arg	Ala 665	Gly	Met	Phe	Val	Ser 670	Lys	Phe
?he	Gly	Gly 675	Tyr	Val	Pro	Glu	Met 680	Val	Leu	Thr	Pro	Asp 685	Asp	Gln	Arg
Leu	Leu 690	Ala	His	Val	Thr	Leu 695	Glu	Leu	Gln	His	Tyr 700	His	Gln	Leu	Leu

1466

Glu Lys Val Arg Ile Arg Asp Ala Leu Arg Ser Ile Leu Thr Ile Ser 710 715 Arg His Gly Asn Gln Tyr Ile Gln Val Asn Glu Pro Trp Lys Arg Ile 725 730 Lys Gly Ser Glu Ala Asp Arg Gln Arg Ala Gly Thr Val Thr Gly Leu 745 Ala Val Asn Ile Ala Ala Leu Leu Ser Val Met Leu Gln Pro Tyr Met 760 Pro Thr Val Ser Ala Thr Ile Gln Ala Gln Leu Gln Leu Pro Pro 770 775 780 Ala Cys Ser Ile Leu Leu Thr Asn Phe Leu Cys Thr Leu Pro Ala Gly 790 795 His Gln Ile Gly Thr Val Ser Pro Leu Phe Gln Lys Leu Glu Asn Asp 805 810 Gln Ile Glu Ser Leu Arg Gln Arg Phe Gly Gly Gln Ala Lys Thr 820 825 Ser Pro Lys Pro Ala Val Val Glu Thr Val Thr Thr Ala Lys Pro Gln 835 840 Gln Ile Gln Ala Leu Met Asp Glu Val Thr Lys Gln Gly Asn Ile Val 855 Arg Glu Leu Lys Ala Gln Lys Ala Asp Lys Asn Glu Val Ala Ala Glu 865 870 875 Val Ala Lys Leu Leu Asp Leu Lys Lys Gln Leu Ala Val Ala Glu Gly 885 890 Asn Pro Leu Lys Pro Leu Lys Ala Arg Arg Lys Ser Lys Arg Pro Trp 900 905 Leu Ile Glu Ser His Phe Asn Arg

920

<210> 1397

<211> 476

<212> PRT

<213> Homo sapiens

915

<220>

<221> SITE															
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<223> Xaa equals any of the naturally occurring L-amino aci												aci	ds		
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	Met	Ala	Ala		Thr	Thr	Leu	Phe	-	Tyr	Ile	Asp	Glu		Gln
1				5					10					15	
			_								_		_		
Asp	Arg	Tyr		Lys	Lys	Leu	Ala	_	Trp	Val	Ala	Ile		Ser	Val
			20					25					30		
_			_		_		_ •								_
ser	АТА	_	Pro	GLu	Lys	Arg	Gly	GLu	Ile	Arg	Arg		Met	Glu	Val
		35					40					45			
77.	71-	71-	7.40	77-7	T	61 -	T	~1	61	G	*** 1	61	T	**- 7	7
Ala		Ата	Asp	vaı	тĀг		Leu	GIY	GLY	ser		GIU	Leu	vaı	Asp
	50					55					60				
T10	G1 11	T 170	Cln	T 12G	T 011	Dro	7 ~ ~	C1	Cor	C1.,	т1-	Dro	T 011	Dro	Dro
65	СТУ	ьys	GIII	гуѕ	70	PIO	Asp	GTA	ser	75	шe	PIO	Leu	PIO	
0.5					70					73					80
Tlo	Len	LOU	Clv.	λνα	T 011	C1	Ser	7.00	Dro	Cln	T ***	T	mb.~	17 - 1	Cvc
116	пец	Leu	GIY	85	Leu	GIY	per	Asp	90	GIII	туу	гур	1111	95	Cys
				0.5					90					93	
Tle	ጥህጉ	Glv	Hic	T.011	Asn	Val	Gln	Pro	د ۱ ۵	Δl =	T 11	Glu	Aen	Glv	mrn.
110	- 1 -	Oly	100	Deu	тэр	Val	GIII	105	лта	ALG	пси	GLu	110	GLY	ııp
			100					105					110		
Asn	Ser	Glu	Pro	Dhe	Thr	T.e.11	t/al	Glu	Δra	Acn	Glv	T.v.e	T.011	Yaa	Gly
1105	DCI	115	110	1110	1111	пси	120	GIU	ALG	пэр	GLY	125	пец	nua	GLY
							120					123			
Ara	Glv	Ser	Thr	Asp	Asp	Lvs	Glv	Pro	Val	Ala	Glv	Trp	Tle	Asn	Ala
9	130				E	135	1				140				
Leu	Glu	Ala	Tvr	Gln	Lvs	Thr	Gly	Gln	Glu	Ile	Pro	Val	Asn	Val	Ara
145			4		150		1			155					160
Phe	Cys	Leu	Glu	Gly	Met	Glu	Glu	Ser	Glv	Ser	Glu	Glv	Leu	Asp	Glu
	-			165					170			•		175	
Leu	Ile	Phe	Ala	Arg	Lys	Asp	Thr	Phe	Phe	Lys	Asp	Val	Asp	Tyr	Val
			180	-	•	-		185		-	•		190	•	
Cys	Ile	Ser	Asp	Asn	Tyr	Trp	Leu	Gly	Lys	Lys	Lys	Pro	Cys	Ile	Thr
-		195	-		-	•	200	-	•	-	-	205	•		
							-								
Tyr	Gly	Leu	Arg	Gly	Ile	Cys	Tyr	Phe	Phe	Ile	Glu	Val	Glu	Cys	Ser
-	210		_	-		215	-				220			-	
Asn	Lys	Asp	Leu	His	Ser	Gly	Val	Tyr	Gly	Gly	Ser	Val	His	Glu	Ala
225	•	-			230	_		_	_	235					240
Met	Thr	Asp	Leu	Ile	Leu	Leu	Met	Gly	Ser	Leu	Val	Asp	Lys	Arg	Gly

				245					250					255	
Asn	Ile	Leu	Ile 260	Pro	Gly	Ile	Asn	Glu 265	Ala	Val	Ala	Ala	Val 270	Thr	Glu
Glu	Glu	His 275	Lys	Leu	туr	Asp	Asp 280	Ile	Asp	Phe	Asp	Ile 285	Glu	Glu	Phe
Ala	Lys 290	Asp	Val	Gly	Ala	Gln 295	Ile	Leu	Leu	His	Ser 300	His	Lys	Lys	Asp
Ile 305	Leu	Met	His	Arg	Trp 310	Arg	Tyr	Pro	Ser	Leu 315	Ser	Leu	His	Gly	Ile 320
Glu	Gly	Ala	Phe	ser 325	Gly	Ser	Gly	Ala	Lys 330	Thr	Val	Ile	Pro	Arg 335	Lys
Val	Val	Gly	Lys 340	Phe	Ser	Ile	Arg	Leu 345	Val	Pro	Asn	Met	Thr 350	Pro	Glu
Val	Val	Gly 355	Glu	Gln	Val	Thr	Ser 360	Tyr	Leu	Thr	Lys	Lys 365	Phe	Ala	Glu
Leu	Arg 370	Ser	Pro	Asn	Glu	Phe 375	Lys	Val	Tyr	Met	Gly 380	His	Gly	Gly	Lys
Pro 385	Trp	Val	Ser	Asp	Phe 390	Ser	His	Pro	His	Туг 395	Leu	Ala	Gly	Arg	Arg 400
Ala	Met	Lys	Thr	Val 405	Phe	Gly	Val	Glu	Pro 410	Asp	Leu	Thr	Arg	Glu 415	Gly
Gly	Ser	Ile	Pro 420	Val	Thr	Leu	Thr	Phe 425	Gln	Glu	Ala	Thr	Gly 430	Lys	Asn
Val	Met	Leu 435	Leu	Pro	Val	Gly	Ser 440	Ala	Asp	Asp	Gly	Ala 445	His	Ser	Gln
Asn	Glu 450	Lys	Leu	Asn	Arg	Tyr 455	Asn	Tyr	Ile	Glu	Gly 460	Thr	Lys	Met	Leu
Ala 465	Ala	Tyr	Leu	Tyr	Glu 470	Val	Ser	Gln	Leu	Lys 475	Asp				

<210> 1398

<211> 187

<212> PRT

<213> Homo sapiens

1469

<220> <221> SITE <222> (4) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1398 Leu His Leu Xaa Pro Thr Ser Ile Ser Ser Ser Ser Cys Ser Val 5 Ser Ser Val Val Ser Gln Arg Leu Thr Glu Ser Pro Cys Ala Leu Val 20 25 Ala Ser Gln Tyr Gly Trp Ser Gly Asn Met Glu Arg Ile Met Lys Ala 40 Gln Ala Tyr Gln Thr Gly Lys Asp Ile Ser Thr Asn Tyr Tyr Ala Ser 55 Gln Lys Lys Thr Phe Glu Ile Asn Pro Arg His Pro Leu Ile Arg Asp 70 Met Leu Arg Arg Ile Lys Glu Asp Glu Asp Asp Lys Thr Val Leu Asp 90 Leu Ala Val Val Leu Phe Glu Thr Ala Thr Leu Arg Ser Gly Tyr Leu 100 105 110 Leu Pro Asp Thr Lys Ala Tyr Gly Asp Arg Ile Glu Arg Met Leu Arg 115 120 Leu Ser Leu Asn Ile Asp Pro Asp Ala Lys Val Glu Glu Glu Pro Glu 135 Glu Glu Pro Glu Glu Thr Ala Glu Asp Thr Thr Glu Asp Thr Glu Gln 145

Ala Lys Glu Ser Thr Ala Glu Lys Asp Glu Leu 180 185

165

<210> 1399

<211> 376

<212> PRT

<213> Homo sapiens

<400> 1399

Lys Ser Ser Thr Gly Val Ile Pro Asp Glu Ala Lys Ala Leu Ser Leu

Asp Glu Asp Glu Glu Met Asp Val Gly Thr Asp Glu Glu Glu Glu Thr

1470

15 1 5 10 Leu Ala Pro Ala Asn Ala Val Ala Gly Leu Leu Pro Gly Gly Leu 25 20 Leu Pro Thr Pro Asn Pro Leu Thr Gln Ile Gly Ala Val Pro Leu Ala Ala Leu Gly Ala Pro Thr Leu Asp Pro Ala Leu Ala Ala Leu Gly Leu 55 Pro Gly Ala Asn Leu Asn Ser Gln Ser Leu Ala Ala Asp Gln Leu Leu 70 Lys Leu Met Ser Thr Val Asp Pro Lys Leu Asn His Val Ala Ala Gly Leu Val Ser Pro Ser Leu Lys Ser Asp Thr Ser Ser Lys Glu Ile Glu 105 Glu Ala Met Lys Arg Val Arg Glu Ala Gln Ser Leu Ile Ser Ala Ala 115 Ile Glu Pro Asp Lys Lys Glu Glu Lys Arg Arg His Ser Arg Ser Arg 135 Ser Arg Ser Arg Arg Arg Thr Pro Ser Ser Ser Arg His Arg Arg 150 155 Ser Arg Ser Arg Ser Arg Arg Ser His Ser Lys Ser Arg Ser Arg 165 170 Arg Arg Ser Lys Ser Pro Arg Arg Arg Ser His Ser Arg Glu Arg 185 Gly Arg Arg Ser Arg Ser Thr Ser Lys Thr Arg Asp Lys Lys Glu 200 Asp Lys Glu Lys Lys Arg Ser Lys Thr Pro Pro Lys Ser Tyr Ser Thr 210 215 Ala Arg Arg Ser Arg Ser Ala Ser Arg Glu Arg Arg Arg Arg Ser 235 Arg Ser Gly Thr Arg Ser Pro Lys Lys Pro Arg Ser Pro Lys Arg Lys 250 Leu Ser Arg Ser Pro Ser Pro Arg Arg His Lys Lys Glu Lys Lys Lys 260 265 Asp Lys Asp Lys Glu Arg Ser Arg Asp Glu Arg Glu Arg Ser Thr Ser

1471

275 280 285 Lys Lys Lys Ser Lys Asp Lys Glu Lys Asp Arg Glu Arg Lys Ser 290 Glu Ser Asp Lys Asp Val Lys Gln Val Thr Arg Asp Tyr Asp Glu Glu 310 315 Glu Gln Gly Tyr Asp Ser Glu Lys Glu Lys Lys Glu Glu Lys Lys Pro 325 330 Ile Glu Thr Gly Ser Pro Lys Thr Lys Glu Cys Ser Val Glu Lys Gly 340 345 Thr Gly Asp Ser Leu Arg Glu Ser Lys Val Asn Gly Asp Asp His His 360 Glu Glu Asp Met Asp Met Ser Asp 370 <210> 1400 <211> 112 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (21) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1400 Thr Ala Gly Leu Thr Ser Arg Gly Trp Gly Ser Leu Pro Pro Ser Leu Glu Thr Phe Leu Xaa Trp Leu Lys Ser Arg Lys Glu Asn Glu Cys Thr Ser Arg Leu Ala Gln Ser Leu Ser Pro Ser Ser Leu Phe Pro Ala 40 Gly Pro Ser Gly Leu Tyr Gly Pro Asp Gly Gly Leu Arg Lys Met Arg 50 55 Gly Leu Trp Phe Ser Gly Ile Pro Ala Gly Ala Thr Pro Ser Cys Leu 70 Gln Met Val His Val Pro Ile Pro Pro Ser Arg Pro Leu Cys Leu

1472

Leu Cys His Arg Asp Ser Gln Gln Arg Phe Phe Val Leu Ala Val
100 105 110

<210> 1401

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<211> 69
<212> PRT
<213> Homo sapiens
<400> 1401
Arg Arg Gln Val Gly Ala Ala Ala Val Ala Met Thr Arg Gly Asn Gln
Arg Glu Leu Ala Arg Gln Lys Asn Met Lys Lys Gln Ser Asp Ser Val
             20
                                 25
Lys Gly Lys Arg Arg Asp Asp Gly Leu Ser Ala Ala Ala Arg Lys Gln
                             40
         35
Arg Asp Ser Glu Ile Met Gln Gln Lys Gln Lys Lys Ala Asn Glu Lys
                         55
Lys Glu Glu Pro Lys
 65
<210> 1402
<211> 177
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (162)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (166)
<223> Xaa equals any of the naturally occurring L-amino acids
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1473

<400> 1402 Arg Pro Pro Arg Arg Xaa Pro Met Asp Gly Pro Ala Ile Ile Thr Gln 5 10 Val Thr Asn Pro Lys Glu Asp Glu Gly Arg Leu Pro Gly Ala Gly Glu Lys Ala Ser Gln Cys Asn Val Ser Leu Lys Lys Gln Arg Ser Arg Ser Ile Leu Ser Ser Phe Phe Cys Cys Phe Arg Asp Tyr Asn Val Glu Ala 55 Pro Pro Pro Ser Ser Pro Ser Val Leu Pro Pro Leu Val Glu Glu Asn 70 75 Gly Gly Leu Gln Lys Pro Pro Ala Lys Tyr Leu Leu Pro Glu Val Thr 90 Val Leu Asp Tyr Gly Lys Lys Cys Val Val Ile Asp Leu Asp Glu Thr 105 Leu Val His Ser Ser Phe Lys Pro Ile Ser Asn Ala Asp Phe Ile Val 115 120 Pro Val Glu Ile Asp Gly Thr Ile His Gln Val Tyr Val Leu Lys Arg 135 Pro His Val Asp Glu Phe Leu Gln Arg Met Gly Gln Leu Leu Asn Val 150 155 Cys Xaa Leu Leu Pro Xaa Gly Gln Val Cys Arg Pro Val Ala Asp Leu 170

Leu

<210> 1403 <211> 82

<212> PRT

<213> Homo sapiens

<400> 1403

Lys His Ile Leu Ser Thr Phe Glu Thr Ser Val Leu Glu Gly Arg Leu 1 5 10 15

His Lys Leu Ser Ser Pro Arg Leu Arg Arg Leu Gln Ser Gly Lys Leu 20 25 30

1474

Thr Cys Arg Asn Gly Val Pro Phe Met Leu Tyr Leu Asp Lys Gly Asn 35 40 45

Gln Lys Trp Asn Gln Cys Arg Gln Asn Leu Gly Phe Ala Ala Ser Ile 50 60

Asn Gln Ser Met Thr Asn Arg Gly Ser Leu Lys Cys Lys Gly Thr Asn 65 70 75 80

Phe Thr

<210> 1404

<211> 251

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (37)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1404

Thr Thr Lys Pro Ala Thr Thr Pro Ser Ser Thr Thr Arg Thr Cys Arg
1 5 10 15

Arg Ser Pro Ser Thr Leu Pro Ser Ala Thr Trp Thr Pro Leu Ala Ser 20 25 30

Arg Thr Ala His Xaa Leu Pro Arg Xaa Tyr Met Tyr Pro Ser Met Asp $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Gln Leu Ala Glu Met Leu Pro Gly Val Leu Gln Gln Phe Gly Leu Lys 50 55 60

Ser Ile Ile Gly Met Gly Thr Gly Ala Gly Ala Tyr Ile Leu Thr Arg
65 70 75 80

Phe Ala Leu Asn Asn Pro Glu Met Val Glu Gly Leu Val Leu Ile Asn 85 90 95

Val Asn Pro Cys Ala Glu Gly Trp Met Asp Trp Ala Ala Ser Lys Ile 100 105 110

Ser Gly Trp Thr Gln Ala Leu Pro Asp Met Val Val Ser His Leu Phe 120 Gly Lys Glu Glu Met Gln Ser Asn Val Glu Val Val His Thr Tyr Arg 135 Gln His Ile Val Asn Asp Met Asn Pro Gly Asn Leu His Leu Phe Ile 145 150 155 Asn Ala Tyr Asn Ser Arg Arg Asp Leu Glu Ile Glu Arg Pro Met Pro 170 Gly Thr His Thr Val Thr Leu Gln Cys Pro Ala Leu Leu Val Val Gly 185 Asp Ser Ser Pro Ala Val Asp Ala Val Val Glu Cys Asn Ser Lys Leu 195 200 Asp Pro Thr Lys Thr Thr Leu Leu Lys Met Ala Asp Cys Gly Gly Leu 215 Pro Gln Ile Ser Gln Pro Ala Lys Leu Ala Glu Ala Phe Lys Tyr Phe 230 235 Val Gln Gly Met Gly Tyr Met Pro Arg Leu Ala

<210> 1405

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1405

Phe Glu Gly Phe Tyr Ser Gly Arg Lys Asn Arg Thr Lys Val Tyr Val
1 5 10 15

Pro Ser Ser Val Val Leu Ile Asp Leu Phe Phe Leu Phe Glu Thr Lys
20 25 30

Val Val Ser Val Phe Trp Phe Ser Gly Asn Met Tyr Tyr Ile Val Leu 35 40 45

Lys Glu Cys Cys Pro Thr Asn Tyr Ser Ser Lys Gln Arg Ile Val Thr
50 55 60

Ile Asn Lys Val Ser Val Thr Leu Leu Pro Leu Ser His Asn Ile His 65 70 75 80

Cys Arg Ala Leu Cys Arg Ser Lys Asn Arg Ala Ala Gln Asn Leu Cys

1476

85 90 95 Gly Ser Phe Leu Ser Phe Cys Asn Leu Arg His Met Phe Gln Arg Thr 100 105 110 Gly Ile Phe Val Trp Ser Ser Asp Leu Gly Asp His Ser His Asn 115 120 <210> 1406 <211> 230 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (90) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (112) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (118) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (169) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (190) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (192) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (194) <223> Xaa equals any of the naturally occurring L-amino acids <220>

<221> SITE <222> (217) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (218) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1406 Ala Glu Arg Pro Leu Gln Val Pro Arg Ser Ala Gly Glu Ala Ala Pro His Ser Arg Arg Pro Pro Gly Leu Leu Pro His Ala Pro Arg Ala Ala 20 Ser Ala Gln Leu Glu Glu Arg Arg Arg Asp Pro His Pro Gly Met Thr Leu Gln Glu Gly Asp Cys Arg Gly Ser Gln Thr Val Ser Leu Thr Met 55 Gly Thr Ala Asp Ser Asp Glu Met Ala Pro Glu Ala Pro Gln His Thr 65 70 75 His Ile Asp Val His Ile His Gln Glu Xaa Ala Leu Ala Lys Leu Leu Leu Thr Cys Cys Ser Ala Leu Arg Pro Arg Ala Thr Gln Ala Arg Xaa 105 Ser Ser Arg Leu Leu Xaa Ala Ser Trp Val Met Gln Ile Val Leu Gly 115 120 Ile Leu Ser Ala Val Leu Gly Gly Phe Phe Tyr Ile Arg Asp Tyr Thr 135 Leu Leu Val Thr Ser Gly Ala Ala Ser Gly Gln Gly Leu Trp Leu Cys 150 155 Cys Trp Ser Cys Cys Leu His Leu Xaa Glu Thr Gly Trp Tyr Ile Leu 165 Gly Pro Ala Glu Asp Ser Ala Asn Ala Gly Lys Leu Ser Xaa Gln Xaa 185 Ser Xaa Ala Ser Asn Phe Gly Asn Glu Glu Phe Arg Tyr Gly Leu Leu 200 Leu Ile Thr Thr Ser Gly Trp Pro Xaa Xaa Gln Val Arg Val Asp Trp 210 215 220

1478

Asn Thr Ser Ser Pro Gln 225 230

<210> 1407

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1407

Arg Gly His Phe Leu Leu Pro Asp Leu Asp Ile Pro Ser Asn Pro Ser 1 10 15

Ser Tyr Ser Met Leu Lys Glu Lys Tyr Ser Gln Met His Tyr Val Asn 20 25 30

Gly Glu Lys Lys His Ser Ile Val Glu Thr Pro Ile Leu Ala Asn Val

Phe Trp Ser Val Phe His Phe Thr Val Tyr Ile Pro Ala Leu Lys Thr 50 55 60

Gln Gly Gln Val Leu Thr Lys Glu Val Cys Ser His Ser Lys Tyr
65 70 75

<210> 1408

<211> 289

<212> PRT

<213> Homo sapiens

<400> 1408

Val Arg Pro Pro Ser His Val Thr Ala Asp Ser Gly Arg Ser Pro Leu

1 10 15

Ser Leu Thr Tyr Leu Pro Leu Gln Glu Pro Gly Asp Met Ala Ala Ala 20

Val Pro Arg Ala Ala Phe Leu Ser Pro Leu Leu Pro Leu Leu Gly
35 40 45

Phe Leu Leu Ser Ala Pro His Gly Gly Ser Gly Leu His Thr Lys 50 55 60

Gly Ala Leu Pro Leu Asp Thr Val Thr Phe Tyr Lys Val Ile Pro Lys
65 70 75 80

Ser Lys Phe Val Leu Val Lys Phe Asp Thr Gln Tyr Pro Tyr Gly Glu

1479

85 90 95

Lys Gln Asp Glu Phe Lys Arg Leu Ala Glu Asn Ser Ala Ser Ser Asp 100 105 110

Asp Leu Leu Val Ala Glu Val Gly Ile Ser Asp Tyr Gly Asp Lys Leu 115 120 125

Asn Met Glu Leu Ser Glu Lys Tyr Lys Leu Asp Lys Glu Ser Tyr Pro 130 135 140

Val Phe Tyr Leu Phe Arg Asp Gly Asp Phe Glu Asn Pro Val Pro Tyr 145 150 155 160

Thr Gly Ala Val Lys Val Gly Ala Ile Gln Arg Trp Leu Lys Gly Gln
165 170 175

Gly Val Tyr Leu Gly Met Pro Gly Cys Leu Pro Val Tyr Asp Ala Leu 180 185 190

Ala Gly Glu Phe Ile Arg Ala Ser Gly Val Glu Ala Arg Gln Ala Leu 195 200 205

Leu Lys Gln Gly Gln Asp Asn Leu Ser Ser Val Lys Glu Thr Gln Lys 210 215 220

Lys Trp Ala Glu Gln Tyr Leu Lys Ile Met Gly Lys Ile Leu Asp Gln 225 230 235 240

Gly Glu Asp Phe Pro Ala Ser Glu Met Thr Arg Ile Ala Arg Leu Ile 245 250 255

Glu Lys Asn Lys Met Ser Asp Gly Lys Lys Glu Glu Leu Gln Lys Ser 260 265 270

Leu Asn Ile Leu Thr Ala Phe Gln Lys Lys Gly Ala Glu Lys Glu Glu 275 280 285

Leu

<210> 1409

<211> 488

<212> PRT

<213> Homo sapiens

<400> 1409

Pro Ala Ser Ala Gly Thr Val Ser Glu Gly Pro Pro Gly Thr Asp Gly
1 5 10 15

Ser	Ala	Gly	Arg 20	Gly	Gly	Thr	Ala	Phe 25	Ala	Met	Ala	Ala	Thr 30	Val	Asn
Leu	Glu	Leu 35	Asp	Pro	Ile	Phe	Leu 40	Lys	Ala	Leu	Gly	Phe 45	Leu	His	Ser
Lys	Ser 50	Lys	Asp	Ser	Ala	Glu 55	Lys	Leu	Lys	Ala	Leu 60	Leu	Asp	Glu	Ser
Leu 65	Ala	Arg	Gly	Ile	Asp 70	Ser	Ser	Tyr	Arg	Pro 75	Ser	Gln	Lys	Asp	Val 80
Glu	Pro	Pro	Lys	Ile 85	Ser	Ser	Thr	Lys	Asn 90	Ile	Ser	Ile	Lys	Gln 95	Glu
Pro	Lys	Ile	Ser 100	Ser	Ser	Leu	Pro	Ser 105	Gly	Asn	Asn	Asn	Gly 110	Lys	Val
Leu	Thr	Thr 115	Glu	Lys	Val	Lys	Lys 120	Glu	Ala	Glu	Lys	Arg 125	Pro	Ala	Asp
Lys	Met 130	Lys	Ser	Asp	Ile	Thr 135	Glu	Gly	Val	Asp	Ile 140	Pro	Lys	Lys	Pro
Arg 145	Leu	Glu	Lys	Pro	Glu 150	Thr	Gln	Ser	Ser	Pro 155	Ile	Thr	Val	Gln	Ser 160
Ser	Lys	Asp	Leu	Pro 165	Met	Ala	Asp	Leu	Ser 170	Ser	Phe	Glu	Glu	Thr 175	Ser
Ala	Asp	Asp	Phe 180	Ala	Met	Glu	Met	Gly 185	Leu	Ala	Cys	Val	Val 190	Cys	Arg
Gln	Met	Met 195	Val	Ala	Ser	Gly	Asn 200	Gln	Leu	Val	Glu	Cys 205	Gln	Glu	Cys
His	Asn 210	Leu	Tyr	His	Arg	Asp 215	Cys	His	Lys	Pro	Gln 220	Val	Thr	Asp	Lys
Glu 225	Ala	Asn	Asp	Pro	Arg 230	Leu	Val	Trp	Tyr	Cys 235	Ala	Arg	Cys	Thr	Arg 240
Gln	Met	Lys	Arg	Met 245	Ala	Gln	Lys	Thr	Gln 250	Lys	Pro	Pro	Gln	Lys 255	Pro
Ala	Pro	Ala	Val 260	Val	Ser	Val	Thr	Pro 265	Ala	Val	Lys	Asp	Pro 270	Leu	Val
Lys	Lys	Pro	Glu	Thr	Lys	Leu	Lys 280	Gln	Glu	Thr	Thr	Phe	Leu	Ala	Phe

Lys Arg Thr Glu Val Lys Thr Ser Thr Val Ile Ser Gly Asn Ser Ser 295 Ser Ala Ser Val Ser Ser Val Thr Ser Gly Leu Thr Gly Trp Ala 305 310 315 Ala Phe Ala Ala Lys Thr Ser Ser Ala Gly Pro Ser Thr Ala Lys Leu 325 330 Ser Ser Thr Thr Gln Asn Asn Thr Gly Lys Pro Ala Thr Ser Ser Ala Asn Gln Lys Pro Val Gly Leu Thr Gly Leu Ala Thr Ser Ser Lys Gly Gly Ile Gly Ser Lys Ile Gly Ser Asn Asn Ser Thr Thr Pro Thr Val 375 Pro Leu Lys Pro Pro Pro Pro Leu Thr Leu Gly Lys Thr Gly Leu Ser 395 390 Arg Ser Val Ser Cys Asp Asn Val Ser Lys Val Gly Leu Pro Ser Pro 405 Ser Ser Leu Val Pro Gly Ser Ser Ser Gln Leu Ser Gly Asn Gly Asn 425 Ser Gly Thr Ser Gly Pro Ser Gly Ser Thr Thr Ser Lys Thr Thr Ser 440 Glu Ser Ser Ser Pro Ser Ala Ser Leu Lys Gly Pro Thr Ser Gln 450 455 Glu Ser Gln Leu Asn Ala Met Lys Arg Leu Gln Met Val Lys Lys 465 470 475

<210> 1410

<211> 64

<212> PRT

<213> Homo sapiens

Ala Ala Gln Lys Lys Leu Lys Lys 485

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

1482

<400> 1410

His Tyr Gly Leu Lys Leu Ala Val Lys Met Pro Asn Thr Val Val Pro 1 5 10 15

Trp Asn Pro Val Tyr Ser Cys Ala Lys Gln Asn Cys Lys Ile Val Lys
20 25 30

Met Ser Tyr Gln Val Ile Arg Arg Leu Gln Arg His His Leu Phe Phe 35 40 45

Ile Ser Phe Phe Xaa Leu Thr His Val Val Val Ile Phe Asn Thr Phe 50 55 60

<210> 1411

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1411

Ala Ala Cys Leu Ala Leu Arg Ile Ala Ala Ala Met Ala Ser Gln Ser 1 5 10 15

Gln Gly Ile Gln Gln Leu Leu Gln Ala Glu Lys Arg Ala Ala Glu Lys 20 25 30

Val Ser Glu Ala Arg Lys Arg Lys Asn Arg Arg Leu Lys Gln Ala Lys
35 40 45

Glu Glu Ala Gln Ala Glu Ile Glu Gln Tyr Arg Leu Gln Arg Glu Lys
50 55 60

Glu Phe Lys Ala Lys Glu Ala Ala Ala Leu Gly Ser Arg Gly Ser Cys
65 70 75 80

Ser Thr Glu Val Glu Lys Glu Thr Gln Glu Lys Met Thr Ile Leu Gln 85 90 95

Thr Tyr Phe Arg Gln Asn Arg Asp Glu Val Leu Asp Asn Leu Leu Ala 100 105 110

Phe Val Cys Asp Ile Arg Pro Glu Ile His Glu Asn Tyr Arg Ile Asn 115 120 125

Gly

1483

<210> 1412

<211> 177

<212> PRT

<213> Homo sapiens

<400> 1412

Val Thr Val Pro Ser Ser Ser Ala Ala Gly Thr Leu Phe Gln Gly Leu
1 5 10 15

Cys Gly Ala Pro Asp Ala Pro His Pro Leu Ser Lys Ile Pro Gly Gly 20 25 30

Arg Gly Gly Arg Asp Pro Ser Leu Ser Ala Leu Ile Tyr Lys Asp 35 40 45

Glu Lys Leu Thr Val Thr Gln Asp Leu Pro Val Asn Asp Gly Lys Pro 50 55 60

His Ile Val His Phe Gln Tyr Glu Val Thr Glu Val Lys Val Ser Ser 65 70 75 80

Trp Asp Ala Val Leu Ser Ser Gln Ser Leu Phe Val Glu Ile Pro Asp 85 90 95

Gly Leu Leu Ala Asp Gly Ser Lys Glu Gly Leu Leu Ala Leu Leu Glu 100 105 110

Phe Ala Glu Glu Lys Met Lys Val Asn Tyr Val Phe Ile Cys Phe Arg 115 120 125

Lys Gly Arg Glu Asp Arg Ala Pro Leu Leu Lys Thr Phe Ser Phe Leu 130 135 140

Gly Phe Glu Ile Val Arg Pro Gly His Pro Cys Val Pro Ser Arg Pro 145 150 155 160

Asp Val Met Phe Met Val Tyr Pro Leu Asp Gln Asn Leu Ser Asp Glu 165 170 175

Asp

<210> 1413

<211> 112

<212> PRT

<213> Homo sapiens

1484

<400> 1413

Ser Gly Leu Arg Leu Ala Met Ser Thr Asn Asn Met Ser Asp Pro Arg 1 5 10 15

Arg Pro Asn Lys Val Leu Arg Tyr Lys Pro Pro Pro Ser Glu Cys Asn 20 25 30

Pro Ala Leu Asp Asp Pro Thr Pro Asp Tyr Met Asn Leu Leu Gly Met 35 40 45

Ile Phe Ser Met Cys Gly Leu Met Leu Lys Leu Lys Trp Cys Ala Trp 50 55 60

Val Ala Val Tyr Cys Ser Phe Ile Ser Phe Ala Asn Ser Arg Ser Ser 65 70 75 80

Glu Asp Thr Lys Gln Met Met Ser Ser Phe Met Leu Ser Ile Ser Ala 85 90 95

Val Val Met Ser Tyr Leu Gln Asn Pro Gln Pro Met Thr Pro Pro Trp
100 105 110

<210> 1414

<211> 186

<212> PRT

<213> Homo sapiens

<400> 1414

Cys Leu Gly Gly Arg Pro Arg Cys Val Leu Arg Leu Thr Ala Asn Leu

1 5 10 15

Glu Gly Arg Arg Asp Ser Ala Thr His Ala Pro Pro His Pro Arg Leu 20 25 30

Arg Val Lys Arg Ala Val Gly Pro Glu Ser Pro Pro Leu Trp Gln Trp 35 40 45

Pro Pro Leu Tyr Ser Ile Leu Pro Ser Gly Arg Ser Ala Val Asn Lys 50 55 60

Arg Trp Ala Pro Gln Ser Thr Cys Pro Pro Thr Ala Leu Ala Val Leu 65 70 75 80

Gly Ser Ser Leu Gln Phe Thr Gly Asn Lys Pro Glu Ser Ala Arg Thr 85 90 95

Arg Gly Cys Ser Pro Gly Ser Ala Arg Pro Pro Leu Ser Pro Ala Thr
100 105 110

Gly Trp Arg Cys Arg Ala Arg Ala Ala Ala Ser Arg Arg Phe Pro Gly 115 120 125

Ala Pro Gly Pro Glu Glu Arg Ser Pro Gln Ser Lys Gly Gly Asn Thr 130 135 140

Thr Asp Thr Val Pro Asn Glu Arg Ser Asp Val Phe Ser Ser Pro Phe 165 170 175

Leu Ile Cys Phe Leu Thr Gly Leu Arg Phe 180 185

<210> 1415

<211> 108

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (46)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1415

Thr Lys Thr Thr Leu Phe Leu Glu Arg Pro Leu Phe Lys Lys Glu Ser 1 5 10 15

Ile Thr Pro Thr Val Glu Leu Asn Ala Leu Cys Met Lys Leu Gly Lys
20 25 30

Lys Pro Met Tyr Lys Pro Val Asp Pro Tyr Ser Arg Met Xaa Ser Thr 35 40 45

Tyr Asn Tyr Asn Met Arg Gly Gly Ala Tyr Pro Pro Arg Tyr Phe Tyr 50 55 60

Pro Phe Pro Xaa Pro Pro Leu Leu Tyr Gln Val Glu Leu Ser Val Gly 65 70 75 80

Gly Gln Gln Phe Asn Gly Lys Gly Lys Thr Arg Gln Ala Ala Lys His
85 90 95

Asp Ala Ala Lys Ala Val Glu Asp Pro Ala Glu 100 105

<210> 1416

<211> 621

<212> PRT

<213> Homo sapiens

<400> 1416

Ala Gly His Arg Ala Gly Val Cys Ser Leu Ser Ala Thr Arg Leu Leu 1 5 10 15

Leu Pro Lys Asp Arg Gly Val Gly Arg Arg Gln Thr Met Trp Thr Leu 20 25 30

Val Ser Trp Val Ala Leu Thr Ala Gly Leu Val Ala Gly Thr Arg Cys $35 \hspace{1cm} 40 \hspace{1cm} 45$

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly 50 55 60

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr 65 70 75 80

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser 85 90 95

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys 100 105 110

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro 115 120 125

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser 130 135 140

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu 145 150 155 160

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly 165 170 175

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys 180 185 190

Cys	Pro	His 195	Gly	Ala	Phe	Cys	Asp 200	Leu	Val	His	Thr	Arg 205	Cys	Ile	Thi
Pro	Thr 210	Gly	Thr	His	Pro	Leu 215	Ala	Lys	Lys	Leu	Pro 220	Ala	Gln	Arg	Thr
Asn 225	Arg	Ala	Val	Ala	Leu 230	Ser	Ser	Ser	Val	Met 235	Cys	Pro	Asp	Ala	Arc 240
Ser	Arg	Cys	Pro	Asp 245	Gly	Ser	Thr	Cys	Cys 250	Glu	Leu	Pro	Ser	Gly 255	Lys
Tyr	Gly	Cys	Cys 260	Pro	Met	Pro	Asn	Ala 265	Thr	Cys	Cys	Ser	Asp 270	His	Leu
His	Cys	Cys 275	Pro	Gln	Asp	Thr	Val 280	Cys	Asp	Leu	Ile	Gln 285	Ser	Lys	Cys
	Ser 290					295					300				
305	Thr				310					315					320
	Tyr			325					330					335	
	Thr		340					345					350		
	Phe	355					360			_		365			
	Val 370					375					380				
385	Gln				390					395					400
	Ser			405					410					415	_
	Pro		420					425					430	_	_
	Gln	435					440					445			
Glu	Ile 450	Val	Ala	Gly	Leu	Glu 455	Lys	Met	Pro	Ala	Arg 460	Arg	Ala	Ser	Leu

1488

Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val 470 475 Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arq Gln His Cys Cys Pro Ala 505 Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val 515 520 Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val 535 Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr 545 550 555 Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln 570 Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg 585 Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp 595 600 Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Leu Leu 610 615 <210> 1417 <211> 340 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (24)

<223> Xaa equals any of the naturally occurring L-amino acids

Ser Ala His Ala Ser Glu Arg Ile Ala Xaa Ser Gly Cys Gly Ala Pro

10

<400> 1417

Ala	Ala	Gly	Ala 20	Gly	Pro	Arg	Xaa	Arg 25	Ser	Leu	Gly	Ala	Asp 30	Pro	Gl
Arg	Ala	Ala 35	Arg	Arg	His	Glu	Gly 40	Gln	Gly	Gly	Glu	Gly 45	Gly	Arg	Arg
Thr	Ala 50	Gly	Arg	Trp	Arg	Arg 55	Lys	Pro	Glu	Lys	Ser 60	Pro	Ser	Ala	Glr
Glu 65	Leu	Lys	Glu	Gln	Gly 70	Asn	Arg	Leu	Phe	Val 75	Gly	Arg	Lys	Tyr	Pro 80
Glu	Ala	Ala	Ala	Cys 85	Tyr	Gly	Arg	Ala	Ile 90	Thr	Arg	Asn	Pro	Leu 95	Va]
Ala	Val	Tyr	Tyr 100	Thr	Asn	Arg	Ala	Leu 105	Cys	Tyr	Leu	Lys	Met 110	Gln	Glr
His	Glu	Gln 115	Ala	Leu	Ala	Asp	Cys 120	Arg	Arg	Ala	Leu	Glu 125	Leu	Asp	Gl
Gln	Ser 130	Val	Lys	Ala	His	Phe 135	Phe	Leu	Gly	Gln	Cys 140	Gln	Leu	Glu	Met
Glu 145	Ser	Tyr	Asp	Glu	Ala 150	Ile	Ala	Asn	Leu	Gln 155	Arg	Ala	Tyr	Ser	Let 160
Ala	Lys	Glu	Gln	Arg 165	Leu	Asn	Phe	Gly	Asp 170	Asp	Ile	Pro	Ser	Ala 175	Leu
Arg	Ile	Ala	Lys 180	Lys	Lys	Arg	Trp	Asn 185	Ser	Ile	Glu	Glu	Arg 190	Arg	Ile
His	Gln	Glu 195	Ser	Glu	Leu	His	Ser 200	Tyr	Leu	Ser	Arg	Leu 205	Ile	Ala	Ala
Glu	Arg 210	Glu	Arg	Glu	Leu	Glu 215	Glu	Cys	Gln	Arg	Asn 220	His	Glu	Gly	Asp
Glu 225	Asp	Asp	Ser	His	Val 230	Arg	Ala	Gln	Gln	Ala 235	Cys	Ile	Glu	Ala	Lys 240
His	Asp	Lys	Tyr	Met 245	Ala	Asp	Met	Asp	Glu 250	Leu	Phe	Ser	Gln	Val 255	Asp
Glu	Lys	Arg	Lys 260	Lys	Arg	Asp	Ile	Pro 265	Asp	Tyr	Leu	Cys	Gly 270	Lys	Ile
Ser	Phe	Glu 275	Leu	Met	Arg		Pro	_	Ile	Thr		Ser	Gly	Ile	Thr

1490

Tyr Asp Arg Lys Asp Ile Glu Glu His Leu Gln Arg Val Gly His Phe 290 295 300

Asp Pro Val Thr Arg Ser Pro Leu Thr Gln Glu Gln Leu Ile Pro Asn 305 310 315 320

Leu Ala Met Lys Glu Val Ile Asp Ala Phe Ile Ser Glu Asn Gly Trp 325 330 335

Val Glu Asp Tyr 340

<210> 1418

<211> 235

<212> PRT

<213> Homo sapiens

<400> 1418

Ser Pro Arg Pro Leu Arg Phe Cys Gly Gly Ala Arg Ala Arg Pro l 5 10 15

Leu Ser Ala Val Ala Arg Pro Ala Arg Ser Ser Asp Pro Leu Arg Ser 20 25 30

Ala Pro Leu Gly Pro Ala Pro Pro Val Asn Met Ile Arg Cys Gly Leu 35 40 45

Ala Cys Glu Arg Cys Arg Trp Ile Leu Pro Leu Leu Leu Ser Ala 50 55 60

Ile Ala Phe Asp Ile Ile Ala Leu Ala Gly Arg Gly Trp Leu Gln Ser 65 70 75 80

Ser Asp His Gly Gln Thr Ser Ser Leu Trp Trp Lys Cys Ser Gln Glu 85 90 95

Gly Gly Gly Ser Gly Ser Tyr Glu Glu Gly Cys Gln Ser Leu Met Glu 100 105 110

Tyr Ala Trp Gly Arg Ala Ala Ala Ala Met Leu Phe Cys Gly Phe Ile 115 120 125

Ile Leu Val Ile Cys Phe Ile Leu Ser Phe Phe Ala Leu Cys Gly Pro 130 135 140

Ala Val Phe Gln Ile Ile Ser Leu Val Ile Tyr Pro Val Lys Tyr Thr

1491

165 170 175

Gln Thr Phe Thr Leu His Ala Asn Arg Ala Val Thr Tyr Ile Tyr Asn 180 185 190

Trp Ala Tyr Gly Phe Gly Trp Ala Ala Thr Ile Ile Leu Ile Gly Cys 195 200 205

Ala Phe Phe Cys Cys Leu Pro Asn Tyr Glu Asp Asp Leu Leu Gly 210 215 220

Asn Ala Lys Pro Arg Tyr Phe Tyr Thr Ser Ala 225 230 235

<210> 1419

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1419

Arg Arg Gln Ala Leu Gln Glu Arg Cys Pro Phe Asn Pro Leu Ser Ala 1 5 10 15

Leu Asp Arg Cys Cys Val Lys Leu Leu Met Asp Ile Tyr Met Arg
20 25 30

Ser Ser Phe Leu Tyr Ala Ile Pro Ala Val Phe Phe Leu Thr Gly 35 40 45

Pro Cys Leu Arg Ile Asn Lys Ser Val Met Ser Glu Thr Lys Val Tyr 50 60

Ser Ser Val Cys Arg Cys Val Ala Pro Pro Phe Ser Pro Ala Ala Pro 65 70 75 80

His Ile Gln Ser Arg Ser 85

<210> 1420

<211> 351

<212> PRT

<213> Homo sapiens

<400> 1420

Thr Trp Cys Thr Thr Thr Met Leu Ala Ala Arg Leu Val Cys Leu Arg
1 5 10 15

1111	Leu	FIO	20	AIG	vai	FILE	nis	25		rne	1111	пуs	30	Ser	FIC
Val	Val	Lys 35	Asn	Ser	Ile	Thr	Lys 40	Asn	Gln	Trp	Leu	Leu 45	Thr	Pro	Sei
Arg	Glu 50	Tyr	Ala	Thr	Lys	Thr 55	Arg	Ile	Gly	Ile	Arg 60	Arg	Gly	Arg	Thi
Gly 65	Gln	Glu	Leu	Lys	Glu 70	Ala	Ala	Leu	Glu	Pro 75	Ser	Met	Glu	Lys	Ile 80
Phe	Lys	Ile	Asp	Gln 85	Met	Gly	Arg	Trp	Phe 90	Val	Ala	Gly	Gly	Ala 95	Ala
Val	Gly	Leu	Gly 100	Ala	Leu	Cys	Tyr	Туг 105	Gly	Leu	Gly	Leu	Ser 110	Asn	Glu
Ile	Gly	Ala 115	Ile	Glu	Lys	Ala	Val 120	Ile	Trp	Pro	Gln	Туг 125	Val	Lys	Asp
Arg	Ile 130	His	Ser	Thr	Tyr	Met 135	Tyr	Leu	Ala	Gly	Ser 140	Ile	Gly	Leu	Thr
Ala 145	Leu	Ser	Ala	Ile	Ala 150	Ile	Ser	Arg	Thr	Pro 155	Val	Leu	Met	Asn	Phe 160
Met	Met	Arg	Gly	Ser 165	Trp	Val	Thr	Ile	Gly 170	Val	Thr	Phe	Ala	Ala 175	Met
Val	Gly	Ala	Gly 180	Met	Leu	Val	Arg	Ser 185	Ile	Pro	Tyr	Asp	Gln 190	Ser	Pro
Gly	Pro	Lys 195	His	Leu	Ala	Trp	Leu 200	Leu	His	Ser	Gly	Val 205	Met	Gly	Ala
Val	Val 210	Ala	Pro	Leu	Thr	11e 215	Leu	Gly	Gly	Pro	Leu 220	Leu	Ile	Arg	Ala
Ala 225	Trp	Tyr	Thr	Ala	Gly 230	Ile	Val	Gly	Gly	Leu 235	Ser	Thr	Val	Ala	Met 240
Cys	Ala	Pro	Ser	Glu 245	Lys	Phe	Leu	Asn	Met 250	Gly	Ala	Pro	Leu	Gly 255	Val
Gly	Leu	Gly	Leu 260	Val	Phe	Val	Ser	Ser 265	Leu	Gly	Ser	Met	Phe 270	Leu	Pro
Pro	Thr	Thr	Val	Ala	Gly	Ala	Thr	Leu	Tyr	ser	Val	Ala	Met	Tyr	Gly

Gly Leu Val Leu Phe Ser Met Phe Leu Leu Tyr Asp Thr Gln Lys Val 290 295 300

Ile Lys Arg Ala Glu Val Ser Pro Met Tyr Gly Val Gln Lys Tyr Asp 305 310 315 320

Pro Ile Asn Ser Met Leu Ser Ile Tyr Met Asp Thr Leu Asn Ile Phe 325 330 335

Met Arg Val Ala Thr Met Leu Ala Thr Gly Gly Asn Arg Lys Lys 340 345 350

<210> 1421

<211> 81

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1421

Cys Gly Xaa Leu Leu Met Ala Gln Gly Leu Ser Ala Ser Ala Leu Glu
1 5 10 15

Gly Leu Lys Thr Glu Glu Gly Ser Val Arg Gly Ala Leu Pro Ala Val 20 25 30

Ser Ser Pro Pro Ala Pro Val Ser Pro Ser Ser Pro Thr Thr His Asn
35 40 45

Gly Glu Leu Glu Pro Ser Phe Ser Pro Leu Leu Gly Glu Gly Lys Thr 50 55 60

Pro Glu Thr Leu Leu Pro Gln Lys Cys Trp Gly Gln Gly Gly Pro Gly 65 70 75 80

Arg

<210> 1422

<211> 484

<212> PRT

<213> Homo sapiens

<400> 1422

Ala 1	Cys	Arg	Ser	Thr 5	Leu	Val	Asp	Pro	Lys 10	Asn	Ser	Ala	Gln	Glu 15	Arg
Arg	Ala	Leu	Gly 20	Pro	Leu	Pro	Pro	Cys 25	Ser	Phe	Ala	Leu	Gln 30	Leu	Gly
Met	Ala	Gly 35	Tyr	Leu	Arg	Val	Val 40	Arg	Ser	Leu	Cys	Arg 45	Ala	Ser	GlΣ
Ser	Arg 50	Pro	Ala	Trp	Ala	Pro 55	Ala	Ala	Leu	Thr	Ala 60	Pro	Thr	Ser	Glr
Glu 65	Gln	Pro	Arg	Arg	His 70	Tyr	Ala	Asp	Lys	Arg 75	Ile	Lys	Val	Ala	Eys
Pro	Val	Val	Glu	Met 85	Asp	Gly	Asp	Glu	Met 90	Thr	Arg	Ile	Ile	Trp 95	Glr
Phe	Ile	Lys	Glu 100	Lys	Leu	Ile	Leu	Pro 105	His	Val	Asp	Ile	Gln 110	Leu	Lys
Tyr	Phe	Asp 115	Leu	Gly	Leu	Pro	Asn 120	Arg	Asp	Gln	Thr	Asp 125	Asp	Gln	Val
Thr	Ile 130	Asp	Ser	Ala	Leu	Ala 135	Thr	Gln	Lys	Tyr	Ser 140	Val	Ala	Val	Lys
Cys 145	Ala	Thr	Ile	Thr	Pro 150	Asp	Glu	Ala	Arg	Val 155	Glu	Glu	Phe	Lys	Leu 160
Lys	Lys	Met	Trp	Lys 165	Ser	Pro	Asn	Gly	Thr 170	Ile	Arg	Asn	Ile	Leu 175	Gly
Gly	Thr	Val	Phe 180	Arg	Glu	Pro	Ile	Ile 185	Cys	Lys	Asn	Ile	Pro 190	Arg	Leu
Val	Pro	Gly 195	Trp	Thr	Lys	Pro	Ile 200	Thr	Ile	Gly	Arg	His 205	Ala	His	Gly
Asp	Gln 210	Tyr	Lys	Ala	Thr	Asp 215	Phe	Val	Ala	Asp	Arg 220	Ala	Gly	Thr	Phe
Lys 225	Met	Val	Phe	Thr	Pro 230	Lys	Asp	Gly	Ser	Gly 235	Val	Lys	Glu	Trp	Glu 240
Val	Tyr	Asn	Phe	Pro 245	Ala	Gly	Gly	Val	Gly 250	Met	Gly	Met	Tyr	Asn 255	Thr
Asp	Glu	Ser	Ile 260	Ser	Gly	Phe		His	Ser	Cys	Phe	Gln	Tyr 270	Ala	Ile

1495

Gln Lys Lys Trp Pro Leu Tyr Met Ser Thr Lys Asn Thr Ile Leu Lys 280 Ala Tyr Asp Gly Arg Phe Lys Asp Ile Phe Gln Glu Ile Phe Asp Lys 295 300 His Tyr Lys Thr Asp Phe Asp Lys Asn Lys Ile Trp Tyr Glu His Arg 310 Leu Ile Asp Asp Met Val Ala Gln Val Leu Lys Ser Ser Gly Gly Phe 325 Val Trp Ala Cys Lys Asn Tyr Asp Gly Asp Val Gln Ser Asp Ile Leu 345 Ala Gln Gly Phe Gly Ser Leu Gly Leu Met Thr Ser Val Leu Val Cys 355 360 Pro Asp Gly Lys Thr Ile Glu Ala Glu Ala Ala His Gly Thr Val Thr 375 Arg His Tyr Arg Glu His Gln Lys Gly Arg Pro Thr Ser Thr Asn Pro Ile Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu Glu His Arg Gly Lys 405 410 Leu Asp Gly Asn Gln Asp Leu Ile Arg Phe Ala Gln Met Leu Glu Lys 420 425 Val Cys Val Glu Thr Val Glu Ser Gly Ala Met Thr Lys Asp Leu Ala 440 Gly Cys Ile His Gly Leu Ser Asn Val Lys Leu Asn Glu His Phe Leu 450 Asn Thr Thr Asp Phe Leu Asp Thr Ile Lys Ser Asn Leu Asp Arg Ala 465 470 475

Leu Gly Arg Gln

<210> 1423

<211> 240

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

1496

<222> (153) <223> Xaa equals any of the naturally occurring L-amino acids Val Arg Ile Pro Gly Ser Thr His Ala Ser Gly Gly Asp Gly Asp Met Glu Ser Gly Ala Tyr Gly Ala Ala Lys Ala Gly Gly Ser Phe Asp Leu Arg Arg Phe Leu Thr Gln Pro Gln Val Val Ala Arg Ala Val Cys 40 Leu Val Phe Ala Leu Ile Val Phe Ser Cys Ile Tyr Gly Glu Gly Tyr 55 Ser Asn Ala His Glu Ser Lys Gln Met Tyr Cys Val Phe Asn Arg Asn Glu Asp Ala Cys Arg Tyr Gly Ser Ala Ile Gly Val Leu Ala Phe Leu Ala Ser Ala Phe Phe Leu Val Val Asp Ala Tyr Phe Pro Gln Ile Ser 100 Asn Ala Thr Asp Arg Lys Tyr Leu Val Ile Gly Asp Leu Leu Phe Ser 120 125 Ala Leu Trp Thr Phe Leu Trp Phe Val Gly Phe Cys Phe Leu Thr Asn 135 Gln Trp Ala Val Thr Asn Pro Lys Xaa Val Leu Val Gly Ala Asp Ser 145 150 Val Arg Ala Ala Ile Thr Phe Ser Phe Phe Ser Ile Phe Ser Trp Gly 170 Val Leu Ala Ser Leu Ala Tyr Gln Arg Tyr Lys Ala Gly Val Asp Asp 185 Phe Ile Gln Asn Tyr Val Asp Pro Thr Pro Asp Pro Asn Thr Ala Tyr 195 200 205 Ala Ser Tyr Pro Gly Ala Ser Val Asp Asn Tyr Gln Gln Pro Pro Phe Thr Gln Asn Ala Glu Thr Thr Glu Gly Tyr Gln Pro Pro Val Tyr 230 235

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<210> 1424
<211> 244
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (221)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1424
Arg Val Arg Arg Gln Ser Ser Gly Asn Leu Thr Met Ala Trp Thr Pro
                  5
                                     10
Leu Leu Pro Leu Leu Thr Phe Cys Thr Val Ser Glu Ala Ser Tyr
             20
                                 25
Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser Pro Gly Gln Thr Ala
                             40
Arg Ile Thr Cys Ser Gly Asp Ala Leu Pro Xaa Lys Tyr Xaa Tyr Trp
     50
                         55
Tyr Gln Gln Lys Ser Gly Gln Ala Pro Val Leu Val Ile Tyr Glu Asp
Thr Arg Arg Pro Ser Ala Ile Pro Glu Arg Phe Ser Ala Ser Ser Ser
                 85
                                     90
Gly Thr Met Ala Thr Leu Thr Ile Ser Gly Ala Gln Val Glu Asp Glu
            100
                                105
Ala Asp Tyr Tyr Cys Tyr Ser Thr Asp Ser Ser Ser Tyr Tyr Arg Val
        115
                            120
                                                 125
Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln Pro Lys Ala Ala
                       135
```

1498

Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu Glu Leu Gln Ala Asn

145 150 155 Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr Pro Gly Ala Val 170 165 Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys Ala Gly Val Glu 180 185 Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr Ala Ala Ser Ser 195 200 205 Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His Xaa Ser Tyr Ser 215 220 Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys Thr Val Ala Pro 225 230 235 Thr Glu Cys Ser <210> 1425 <211> 173 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (1) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (115) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (136) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (137) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (159)

1499

<223> Kaa equals any of the naturally occurring L-amino acids

<400> 1425

Xaa Val Arg Val Gln Thr Arg Gly Ser Ala Asp Pro Ala Gln Leu Arg
1 5 10 15

Arg His Pro Gly Tyr Lys Arg Thr Ala Ser Ala Thr Leu Ser Asp Pro
20 25 30

Ala Ala Ala Met Gln Pro Ser Ser Leu Leu Pro Leu Ala Leu Cys $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Leu Leu Ala Ala Pro Ala Ser Ala Leu Val Arg Ile Pro Leu His Lys 50 55 60

Phe Thr Ser Ile Arg Arg Thr Met Ser Glu Val Gly Gly Ser Val Glu 65 70 75 80

Asp Leu Ile Ala Lys Gly Pro Val Ser Lys Tyr Ser Gln Ala Val Pro 85 90 95

Ala Val Thr Glu Gly Pro Ile Pro Glu Val Leu Lys Asn Tyr Met Asp 100 105 110

Ala Gln Xaa Tyr Gly Glu Ile Gly Ile Gly Thr Pro Pro Gln Cys Phe 115 120 125

Thr Val Val Phe Asp Thr Gly Xaa Xaa Asn Leu Trp Val Pro Ser Ile 130 135 140

Ser Asp Lys Ser Ser Asn Tyr Val Lys Asn Gly Asn Ser 165 170

<210> 1426

<211> 351

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (35)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1426

Ile Arg His Glu Ile Leu Trp Leu Leu Cys Ser His Arg Pro Ala Pro 1 5 10 15

GIĀ	Arg	Pro	20	Tnr	HIS	Asn	Ala	H1S 25	Asn	Trp	Arg	Leu	30	GIN	АІА
Pro	Ala	Xaa 35	Trp	Tyr	Asn	Asp	Thr 40	Tyr	Pro	Leu	Ser	Pro 45	Pro	Gln	Arg
Thr	Pro 50	Ala	Gly	Ile	Arg	Tyr 55	Arg	Ile	Ala	Val	Ile 60	Ala	Asp	Leu	Asp
Thr 65	Glu	Ser	Arg	Ala	Gln 70	Glu	Glu	Asn	Thr	Trp 75	Phe	Ser	Tyr	Leu	Lys 80
Lys	Gly	Tyr	Leu	Thr 85	Leu	Ser	Asp	Ser	Gly 90	Asp	Lys	Val	Ala	Val 95	Glu
Trp	Asp	Lys	Asp 100	His	Gly	Val	Leu	Glu 105	Ser	His	Leu	Ala	Glu 110	Lys	Gly
Arg	Gly	Met 115	Glu	Leu	Ser	Asp	Leu 120	Ile	Val	Phe	Asn	Gly 125	Lys	Leu	Tyr
Ser	Val 130	Asp	Asp	Arg	Thr	Gly 135	Val	Val	Tyr	Gln	Ile 140	Glu	Gly	Ser	Lys
Ala 145	Val	Pro	Trp	Val	Ile 150	Leu	Ser	Asp	Gly	Asp 155	Gly	Thr	Val	Glu	Lys 160
Gly	Phe	Lys	Ala	Glu 165	Trp	Leu	Ala	Val	Lys 170	Asp	Glu	Arg	Leu	Туг 175	Val
Gly	Gly	Leu	Gly 180	Lys	Glu	Trp	Thr	Thr 185	Thr	Thr	Gly	Asp	Val 190	Val	Asn
Glu	Asn	Pro 195	Glu	Trp	Val	Lys	Val 200	Val	Gly	Tyr	Lys	Gly 205	Ser	Val	Asp
His	Glu 210	Asn	Trp	Val	Ser	Asn 215	Tyr	Asn	Ala	Leu	Arg 220	Ala	Ala	Ala	Gly
Ile 225	Gln	Pro	Pro	Gly	Tyr 230	Leu	Ile	His	Glu	Ser 235	Ala	Cys	Trp	Ser	Asp 240
Thr	Leu	Gln	Arg	Trp 245	Phe	Phe	Leu	Pro	Arg 250	Arg	Ala	Ser	Gln	Glu 255	Arg
Tyr	Ser	Glu	Lys 260	Asp	Asp	Glu	Arg	Lys 265	Gly	Ala	Asn	Leu	Leu 270	Leu	Ser
Ala	Ser	Pro	Asp	Phe	Gly	Asp	Ile	Ala	Val	Ser	His	Val	Gly	Ala	Val

Val Pro Thr His Gly Phe Ser Ser Phe Lys Phe Ile Pro Asn Thr Asp 290 295 300

Asp Gln Ile Ile Val Ala Leu Lys Ser Glu Glu Asp Ser Gly Arg Val 305 310 315 320

Ala Ser Tyr Ile Met Ala Phe Thr Leu Asp Gly Arg Phe Leu Leu Pro 325 330 335

Glu Thr Lys Ile Gly Ser Val Lys Tyr Glu Gly Ile Glu Phe Ile 340 345 350

<210> 1427

<211> 510

<212> PRT

<213> Homo sapiens

<400> 1427

Glu Arg Ser Trp Phe Ala Gln Val Arg Arg Leu Gly Pro His Gly Ala 1 5 10 15

Val Ala Arg Leu Arg Val Arg Gly Leu Pro Gly Ala Gly Arg Gly Leu 20 25 30

Arg Leu Pro Ala Gly Ala Arg Ala Ala Arg Leu Gly Ala Ala Leu Ser

Leu Glu Leu Ala Val Ser Gly Ala Arg Ala Cys Ala Pro Gly Thr Arg 50 55 60

Leu Pro Arg Gly Pro Val Gly Gly Ser Trp Asp Ala Leu Ile Val Arg
65 70 75 80

Pro Val Arg Arg Trp Arg Arg Val Ala Val Gly Val Asn Ala Cys Val 85 90 95

Asp Val Val Leu Ser Gly Val Lys Leu Leu Gln Ala Leu Gly Leu Ser 100 105 110

Pro Gly Asn Gly Lys Asp His Ser Ile Leu His Ser Arg Asn Asp Leu 115 120 125

Glu Glu Ala Phe Ile His Phe Met Gly Lys Gly Ala Ala Ala Glu Arg 130 135 140

Phe Phe Ser Asp Lys Glu Thr Phe His Asp Ile Ala Gln Val Ala Ser 145 150 155 160

Glu	Pne	Pro	GIŸ	165	GIN	HIS	Tyr	Val	G1y 170	-	Asn	Ala	АІА	175	lle
Gly	Gln	Lys	Phe 180	Ala	Ala	Asn	Ser	Asp 185	Leu	Lys	Val	Leu	Leu 190	Cys	Gly
Pro	Val	Gly 195	Pro	Lys	Leu	His	Glu 200	Leu	Leu	Asp	Asp	Asn 205	Val	Phe	Val
Pro	Pro 210	Glu	Ser	Leu	Gln	Glu 215	Val	Asp	Glu	Phe	His 220	Leu	Ile	Leu	Glu
Tyr 225	Gln	Ala	Gly	Glu	Glu 230	Trp	Gly	Gln	Leu	Lys 235	Ala	Pro	His	Ala	Asn 240
Arg	Phe	Ile	Phe	Ser 245	His	Asp	Leu	Ser	Asn 250	Gly	Ala	Met	Asn	Met 255	Leu
Glu	Val	Phe	Val 260	Ser	Ser	Leu	Glu	Glu 265	Phe	Gln	Pro	Asp	Leu 270	Val	Val
Leu	Ser	Gly 275	Leu	His	Met	Met	Glu 280	Gly	Gln	Ser	Lys	Glu 285	Leu	Gln	Arg
Lys	Arg 290	Leu	Leu	Glu	Val	Val 295	Thr	Ser	Ile	Ser	Asp 300	Ile	Pro	Thr	Gly
11e 305	Pro	Val	His	Leu	Glu 310	Leu	Ala	Ser	Met	Thr 315	Asn	Arg	Glu	Leu	Met 320
				325					330				Ser	335	-
Leu	Asn	Glu	Gln 340	Glu	Leu	Leu	Phe	Leu 345	Thr	Gln	Ser	Ala	Ser 350	Gly	Pro
		355				_	360				_	365	Gly		
Ser	Asp 370	Ile	Leu	Phe	Trp	Ile 375	Leu	Lys	Glu	His	Gly 380	Arg	Ser	Lys	Ser
Arg 385	Ala	Ser	Asp	Leu	Thr 390	Arg	Ile	His	Phe	His 395	Thr	Leu	Val	Tyr	His 400
				405					410				Ala	415	
Ala	Ala	Gly	Ala 420	Arg	Val	Ala	Gly	Thr 425	Gln	Ala	Cys	Ala	Thr 430	Glu	Thr

1503

Ile Asp Thr Ser Arg Val Ser Leu Arg Ala Pro Gln Glu Phe Met Thr
435 440 445

Ser His Ser Glu Ala Gly Ser Arg Ile Val Leu Asn Pro Asn Lys Pro 450 455 460

Val Val Glu Trp His Arg Glu Gly Ile Ser Phe His Phe Thr Pro Val 465 470 475 480

Leu Val Cys Lys Asp Pro Ile Arg Thr Val Gly Leu Gly Asp Ala Ile 485 490 495

Ser Ala Glu Gly Leu Phe Tyr Ser Glu Val His Pro His Tyr 500 505 510

<210> 1428

<211> 316

<212> PRT

<213> Homo sapiens

<400> 1428

Pro Pro Leu Pro Pro Arg Ser Phe Pro Asn Leu Phe Ser Arg Pro Glu
1 5 10 15

Pro Leu Pro Glu Pro Gly Arg Arg Gly Cys Asn Arg Ser Arg Glu Pro
20 25 30

Ala Ala Arg Ala Pro Ser Pro Pro Pro Pro Phe Glu Gly Ala Pro Gly 35 40 45

Arg Ala Met Val Lys Val Thr Phe Asn Ser Ala Leu Ala Gln Lys Glu 50 55 60

Ala Lys Lys Asp Glu Pro Lys Ser Gly Glu Glu Ala Leu Ile Ile Pro 65 70 75 80

Pro Asp Ala Val Ala Val Asp Cys Lys Asp Pro Asp Asp Val Val Pro
85 90 95

Val Gly Gln Arg Arg Ala Trp Cys Trp Cys Met Cys Phe Gly Leu Ala 100 105 110

Phe Met Leu Ala Gly Val Ile Leu Gly Gly Ala Tyr Leu Tyr Lys Tyr 115 120 125

Phe Ala Leu Gln Pro Asp Asp Val Tyr Tyr Cys Gly Ile Lys Tyr Ile 130 135 140

Lys Asp Asp Val Ile Leu Asn Glu Pro Ser Ala Asp Ala Pro Ala Ala

1504

155 145 150 160 Leu Tyr Gln Thr Ile Glu Glu Asn Ile Lys Ile Phe Glu Glu Glu 165 170 Val Glu Phe Ile Ser Val Pro Val Pro Glu Phe Ala Asp Ser Asp Pro 185 Ala Asn Ile Val His Asp Phe Asn Lys Leu Thr Ala Tyr Leu Asp 200 Leu Asn Leu Asp Lys Cys Tyr Val Ile Pro Leu Asn Thr Ser Ile Val 210 215 Met Pro Pro Arg Asn Leu Leu Glu Leu Leu Ile Asn Ile Lys Ala Gly 230 235 Thr Tyr Leu Pro Gln Ser Tyr Leu Ile His Glu His Met Val Ile Thr 245 250 Asp Arg Ile Glu Asn Ile Asp His Leu Gly Phe Phe Ile Tyr Arg Leu 260 Cys His Asp Lys Glu Thr Tyr Lys Leu Gln Arg Arg Glu Thr Ile Lys 280 Gly Ile Gln Lys Arg Glu Ala Ser Asn Cys Phe Ala Ile Arg His Phe 290 295 Glu Asn Lys Phe Ala Val Glu Thr Leu Ile Cys Ser 305 310 <210> 1429 <211> 398 <212> PRT <213> Homo sapiens <400> 1429 His Thr Arg Val Asp Phe Asn Val Pro Met Lys Asn Asn Gln Ile Thr Asn Asn Gln Arg Ile Lys Ala Ala Val Pro Ser Ile Lys Phe Cys Leu 25 Asp Asn Gly Ala Lys Ser Val Val Leu Met Ser His Leu Gly Arg Pro 40 Asp Gly Val Pro Met Pro Asp Lys Tyr Ser Leu Glu Pro Val Ala Val 50 55

Glu 65	Leu	Lys	Ser	Leu	Leu 70	Gly	Lys	Asp	Val	Leu 75	Phe	Leu	Lys	Asp	Суs 80
Val	Gly	Pro	Glu	Val 85	Glu	Lys	Ala	Cys	Ala 90	Asn	Pro	Ala	Ala	Gly 95	Ser
Val	Ile	Leu	Leu 100	Glu	Asn	Leu	Arg	Phe 105	His	Val	Glu	Glu	Glu 110	Gly	Lys
Gly	Lys	Asp 115	Ala	Ser	Gly	Asn	Lys 120	Val	Lys	Ala	Glu	Pro 125	Ala	Lys	Ile
Glu	Ala 130	Phe	Arg	Ala	Ser	Leu 135	Ser	Lys	Leu	Gly	Asp 140	Val	Tyr	Val	Asn
Asp 145	Ala	Phe	Gly	Thr	Ala 150	His	Arg	Ala	His	Ser 155	Ser	Met	Val	Gly	Val 160
Asn	Leu	Pro	Gln	Lys 165	Ala	Gly	Gly	Phe	Leu 170	Met	Lys	Lys	Glu	Leu 175	Asn
Tyr	Phe	Ala	Lys 180	Ala	Leu	Glu	Ser	Pro 185	Glu	Arg	Pro	Phe	Leu 190	Ala	Ile
Leu	Gly	Gly 195	Ala	Lys	Val	Ala	Asp 200	Lys	Ile	Gln	Leu	Ile 205	Asn	Asn	Met
Leu	Asp 210	Lys	Val	Asn	Glu	Met 215	Ile	Ile	Gly	Gly	Gly 220	Met	Ala	Phe	Thr
Phe 225	Leu	Lys	Val	Leu	Asn 230	Asn	Met	Glu	Ile	Gly 235	Thr	Ser	Leu	Phe	Asp 240
Glu	Glu	Gly	Ala	Lys 245	Ile	Val	Lys	Asp	Leu 250	Met	Ser	Lys	Ala	Glu 255	Lys
Asn	Gly	Val	Lys 260	Ile	Thr	Leu	Pro	Val 265	Asp	Phe	Val	Thr	Ala 270	Asp	Lys
Phe	Asp	Glu 275	Asn	Ala	Lys	Thr	Gly 280	Gln	Ala	Thr	Val	Ala 285	Ser	Gly	Ile
Pro	Ala 290	Gly	Trp	Met	Gly	Leu 295	Asp	Cys	Gly	Pro	Glu 300	Ser	Ser	Lys	Lys
Tyr 305	Ala	Glu	Ala	Val	Thr 310	Arg	Ala	Lys	Gln	Ile 315	Val	Trp	Asn	Gly	Pro 320
Val	Gly	Val	Phe	Glu 325	Trp	Glu	Ala	Phe	Ala 330	Arg	Gly	Thr	Lys	Ala 335	Leu

1506

Met Asp Glu Val Val Lys Ala Thr Ser Arg Gly Cys Ile Thr Ile Ile 340 345 350

Gly Gly Asp Thr Ala Thr Cys Cys Ala Lys Trp Asn Thr Glu Asp 355 360 365

Lys Val Ser His Val Ser Thr Gly Gly Ala Ser Leu Glu Leu Leu 370 375 380

Glu Gly Lys Val Leu Pro Gly Val Asp Ala Leu Ser Asn Ile 385 390 395

<210> 1430

<211> 249

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (245)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1430

Pro Ala Met Gly Ala Ala Val Phe Phe Gly Cys Thr Phe Val Ala Phe 1 5 10 15

Gly Pro Ala Phe Ala Leu Phe Leu Ile Thr Val Ala Gly Asp Pro Leu 20 25 30

Arg Val Ile Ile Leu Val Ala Gly Ala Phe Phe Trp Leu Val Ser Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Leu Leu Ala Ser Val Val Trp Phe Ile Leu Val His Val Thr Asp Arg 50 55 60

Ser Asp Ala Arg Leu Gln Tyr Gly Leu Leu Ile Phe Gly Ala Ala Val 65 70 75 80

Ser Val Leu Gln Glu Val Phe Arg Phe Ala Tyr Tyr Lys Leu Leu 85 90 95

Lys Lys Ala Asp Glu Gly Leu Ala Ser Leu Ser Glu Asp Gly Arg Ser 100 105 110

Pro Ile Ser Ile Arg Gln Met Ala Tyr Val Ser Gly Leu Ser Phe Gly 115 120 125

Ile Ile Ser Gly Val Phe Ser Val Ile Asn Ile Leu Ala Asp Ala Leu

1507

130 135 140 Gly Pro Gly Val Val Gly Ile His Gly Asp Ser Pro Tyr Tyr Phe Leu 150 155 Thr Ser Ala Phe Leu Thr Ala Ala Ile Ile Leu Leu His Thr Phe Trp 165 170 Gly Val Val Phe Phe Asp Ala Cys Glu Arg Arg Arg Tyr Trp Ala Leu 185 Gly Leu Val Val Gly Ser His Leu Leu Thr Ser Gly Leu Thr Phe Leu 195 200 Asn Pro Trp Tyr Glu Ala Ser Leu Leu Pro Ile Tyr Ala Val Thr Val 215 220 Ser Met Gly Leu Trp Ala Phe Ile Thr Ala Gly Gly Ser Leu Arg Ser 230 235 Ile Gln Arg Ser Xaa Leu Cys Lys Asp 245 <210> 1431 <211> 271 <212> PRT <213> Homo sapiens <400> 1431 Arg Pro Thr Arg Pro Val Met Ala Pro Arg Ser Leu Leu Leu Leu Leu 5 10 Ser Gly Ala Leu Ala Leu Thr Asp Thr Trp Ala Gly Ser His Ser Leu 25 Arg Tyr Phe Ser Thr Ala Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Tyr Ile Ala Val Glu Tyr Val Asp Asp Thr Gln Phe Leu Arg Phe Asp 50 55 Ser Asp Ala Ala Ile Pro Arg Met Glu Pro Arg Glu Pro Trp Val Glu 70 75 Gln Glu Gly Pro Gln Tyr Trp Glu Trp Thr Thr Gly Tyr Ala Lys Ala 90

Asn Ala Gln Thr Asp Arg Val Ala Leu Arg Asn Leu Leu Arg Arg Tyr

105

1508

Asn Gln Ser Glu Ala Gly Ser His Thr Leu Gln Gly Met Asn Gly Cys 120 Asp Met Gly Pro Asp Gly Arg Leu Leu Arg Gly Tyr His Gln His Ala 130 135 Tyr Asp Gly Lys Asp Tyr Ile Ser Leu Asn Glu Asp Leu Arg Ser Trp 150 155 Thr Ala Ala Asp Thr Val Ala Gln Ile Thr Gln Arg Phe Tyr Glu Ala 170 Glu Glu Tyr Ala Glu Glu Phe Arg Thr Tyr Leu Glu Gly Glu Cys Leu Glu Leu Leu Arg Arg Tyr Leu Glu Asn Gly Lys Glu Thr Leu Gln Arg 200 Ala Asp Pro Pro Lys Ala His Val Ala His His Pro Ile Ser Asp His 215 Glu Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile 225 230 Thr Leu Thr Trp Gln Arg Asp Gly Glu Glu Gln Thr Gln Asp Thr Glu 250 Leu Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Arg Ser Gly 265

<210> 1432

<211> 455

<212> PRT

<213> Homo sapiens

<400> 1432

Ala His Ala Ser Gly Ala Pro Glu Gln Arg Pro Arg Pro Pro Arg Leu
1 5 10 15

Leu Arg Arg Asp Leu Glu Arg Lys Thr Pro Ala Arg Arg Pro Ala Leu
20 25 30

Ala Ser Leu Pro Thr Gly His Thr Ala Pro Pro Pro Arg Pro Arg Cys
35 40 45

Ala Arg Pro Val Arg Cys Thr Pro Ala Cys Trp Arg Leu Arg Arg Arg 50 55 60

Ala 65	Arg	Pro	Gly	Leu	Leu 70	Leu	Arg	Ala	Thr	Met 75	Ser	Ser	Arg	Ile	Ala 80
Arg	Ala	Leu	Ala	Leu 85	Val	Val	Thr	Leu	Leu 90	His	Leu	Thr	Arg	Leu 95	Ala
Leu	Ser	Thr	Cys 100	Pro	Ala	Ala	Cys	His 105	Cys	Pro	Leu	Glu	Ala 110	Pro	Lys
Cys	Ala	Pro 115	Gly	Val	Gly	Leu	Val 120	Arg	Asp	Gly	Cys	Gly 125	Cys	Cys	Lys
Val	Cys 130	Ala	Lys	Gln	Leu	Asn 135	Glu	Asp	Cys	Ser	Lys 140	Thr	Gln	Pro	Cys
Asp 145	His	Thr	Lys	Gly	Leu 150	Glu	Cys	Asn	Phe	Gly 155	Ala	Ser	Ser	Thr	Ala 160
Leu	Lys	Gly	Ile	Cys 165	Arg	Ala	Gln	Ser	Glu 170	Gly	Arg	Pro	Cys	Glu 175	Tyr
Asn	Ser	Arg	Ile 180	Tyr	Gln	Asn	Gly	Glu 185	Ser	Phe	Gln	Pro	Asn 190	Cys	Lys
His	Gln	Cys 195	Thr	Cys	Ile	Asp	Gly 200	Ala	Val	Gly	Cys	Ile 205	Pro	Leu	Суз
Pro	Gln 210	Glu	Leu	Ser	Leu	Pro 215	Asn	Leu	Gly	Суѕ	Pro 220	Asn	Pro	Arg	Leu
225					Gln 230	_	_			235					240
		_	_	245	Met		_		250	_			_	255	
	_		260		Ser			265					270		
		275			Gly		280					285			
	290				Leu	295					300				
305					Trp 310					315					320
Ile	Ser	Thr	Arg	Val 325	Thr	Asn	Asp	Asn	Pro 330	Glu	Cys	Arg	Leu	Val 335	Lys

1510

Glu Thr Arg Ile Cys Glu Val Arg Pro Cys Gly Gln Pro Val Tyr Ser 340 345 350

Ser Leu Lys Lys Gly Lys Lys Cys Ser Lys Thr Lys Lys Ser Pro Glu 355 360 365

Pro Val Arg Phe Thr Tyr Ala Gly Cys Leu Ser Val Lys Lys Tyr Arg 370 375 380

Pro Lys Tyr Cys Gly Ser Cys Val Asp Gly Arg Cys Cys Thr Pro Gln 385 390 395 400

Leu Thr Arg Thr Val Lys Met Arg Phe Arg Cys Glu Asp Gly Glu Thr 405 410 415

Phe Ser Lys Asn Val Met Met Ile Gln Ser Cys Lys Cys Asn Tyr Asn 420 425 430

Cys Pro His Ala Asn Glu Ala Ala Phe Pro Phe Tyr Arg Leu Phe Asn 435 440445

Asp Ile His Lys Phe Arg Asp 450 455

<210> 1433

<211> 87

<212> PRT

<213> Homo sapiens

<400> 1433

Thr Glu Gly Glu Thr Trp Arg Ser Asp Ser Glu Val Arg Leu Gln Leu
1 5 10 15

Ala His His Leu Arg Pro Gly Pro Asp Glu Pro Pro Val Ala Ser Ala 20 25 30

Gly Ala Ala Ala Ser Arg Gly Ala Cys Gly Pro Ser His Ser Arg
35 40 45

His Cys Leu Pro Ala Gly Leu Glu Pro Ser Glu Arg Pro Asn Pro Arg 50 55 60

Pro Gly Arg Asp Leu Arg Gly Met Thr Ala Glu Pro Pro Lys Gly Gly 65 70 75 80

Glu Phe Glu Gly Arg Gly Pro

1511

<210> 1434 <211> 110 <212> PRT <213> Homo sapiens <400> 1434 Val Trp Arg Ala Gly Ala Gly Met Ala Ser Leu Arg Ser Gln His Gly Pro Gly Ala Pro Glu Ser Leu Arg Lys Val Leu Met Pro Ser Ser Met 25 Gly Leu Leu Ile Leu Tyr Ala Arg Leu Pro Pro Ser Leu Val Gly 35 40 Gln Ala Gly Arg Trp Ile Gly Trp Ala Gly Arg Ala Gly Gly Gln Ala Val Arg Gln Pro Ser Pro Thr Val Leu Ile Asp Gly Val Glu Cys Ser 70 75 Asp Val Lys Phe Phe Gln Leu Ala Ala Gln Trp Ser Ser His Val Lys 85 90 His Phe Pro Ile Cys Ile Phe Gly His Ser Lys Ala Thr Phe 100 105 <210> 1435 <211> 103 <212> PRT <213> Homo sapiens <400> 1435 Gly Ser Gln Asp Ala Arg Arg Gly Ser Gly Leu Gly Val Ser Ser Phe Leu Arg Gly Ser Gly Ser Gly Pro Leu Trp Val Gln His Gly Lys 25 Arg Gly Arg Tyr Phe Ser Ser Trp Ala Phe Ile Lys Glu Lys Thr Met 35 Leu Ala Gly Arg Gly Gly Ser Arg Leu Gln Ser Gln His Phe Gly Arg

Pro Arg Arg Val Asp His Leu Arg Ser Gly Val Gln Asp Gln Pro Gly

75

1512

Gln His Gly Glu Thr Pro Ser Leu Leu Lys Asn Thr Lys Ile Ser Gln 85 90 95

Val Trp Trp Leu Thr Leu Met 100

<210> 1436

<211> 413

<212> PRT

<213> Homo sapiens

<400> 1436

Asn Glu Cys Thr Gly Pro Glu Phe Arg Val Asp Pro Arg Val Ala Ser 1 5 10 15

Ala Pro Arg Ala Gln Ser Leu Ala Phe Ala Asp Pro Pro Pro Val His
20 25 30

Thr Arg Arg Gln Leu Thr Met Asp Asp Asp Ile Ala Ala Leu Val Val 35 40 45

Asp Asn Gly Ser Gly Met Cys Lys Ala Gly Phe Ala Gly Asp Asp Ala 50 55 60

Pro Arg Ala Val Phe Pro Ser Ile Val Gly Arg Pro Arg His Gln Gly 65 70 75 80

Val Met Val Gly Met Gly Gln Lys Asp Ser Tyr Val Gly Asp Glu Ala 85 90 95

Gln Ser Lys Arg Gly Ile Leu Thr Leu Lys Tyr Pro Ile Glu His Gly 100 105 110

Ile Val Thr Asn Trp Asp Asp Met Glu Lys Ile Trp His His Thr Phe 115 120 125

Tyr Asn Glu Leu Arg Val Ala Pro Glu Glu His Pro Val Leu Leu Thr 130 135 140

Glu Ala Pro Leu Asn Pro Lys Ala Asn Arg Glu Lys Met Thr Gln Ile 145 150 155 160

Met Phe Glu Thr Phe Asn Thr Pro Ala Met Tyr Val Ala Ile Gln Ala 165 170 175

Val Leu Ser Leu Tyr Ala Ser Gly Arg Thr Thr Gly Ile Val Met Asp 180 185 190

Ser Gly Asp Gly Val Thr His Thr Val Pro Ile Tyr Glu Gly Tyr Ala

1513

200 195 205 Leu Pro His Ala Ile Leu Arg Leu Asp Leu Ala Gly Arg Asp Leu Thr 210 215 220 Asp Tyr Leu Met Lys Ile Leu Thr Glu Arg Gly Tyr Ser Phe Thr Thr 230 235 Thr Ala Glu Arg Glu Ile Val Arg Asp Ile Lys Glu Lys Leu Cys Tyr 250 Val Ala Leu Asp Phe Glu Glu Met Ala Thr Ala Ala Ser Ser Ser 260 265 Ser Leu Glu Lys Ser Tyr Glu Leu Pro Asp Gly Gln Val Ile Thr Ile 280 Gly Asn Glu Arg Phe Arg Cys Pro Glu Ala Leu Phe Gln Pro Ser Phe 300 295 Leu Gly Met Glu Ser Cys Gly Ile His Glu Thr Thr Phe Asn Ser Ile 305 Met Lys Cys Asp Val Asp Ile Arg Lys Asp Leu Tyr Ala Asn Thr Val 325 330 Leu Ser Gly Gly Thr Thr Met Tyr Pro Gly Ile Ala Asp Arg Met Gln 345 Lys Glu Ile Thr Ala Leu Ala Pro Ser Thr Met Lys Ile Lys Ile Ile 355 360 Ala Pro Pro Glu Arg Lys Tyr Ser Val Trp Ile Gly Gly Ser Ile Leu Ala Ser Leu Ser Thr Phe Gln Gln Met Trp Ile Ser Lys Gln Glu Tyr 390 395 Asp Glu Ser Gly Pro Ser Ile Val His Arg Lys Cys Phe 405 410

<210> 1437

<211> 97

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (28)

1514

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1437

Val Val Pro Ser Thr Lys Asp Phe Leu Val Gly Val Lys Gly Ser Gly
1 5 10 15

Gly His Arg Gly Gly Glu Met Ala Phe Ser Xaa Ser Gln Ala Pro 20 25 30

Tyr Leu Ser Pro Ala Val Pro Phe Ser Gly Thr Ile Gln Gly Gly Leu 35 40 45

Gln Asp Gly Leu Gln Ile Thr Val Asn Gly Thr Val Leu Ser Ser Ser 50 60

Gly Thr Ser Gly Asn Asp Ile Ala Phe His Phe Asn Pro Arg Phe Glu 65 70 75 80

Asp Gly Gly Tyr Val Val Cys Thr Ala Gly Arg Thr Glu Ala Gly Gly 85 90 95

Pro

<210> 1438

<211> 153

<212> PRT

<213> Homo sapiens

<400> 1438

Leu Ala Pro Leu Arg Cys Gln Pro Gly Thr Arg Thr Gln Pro Arg Ser
1 5 10 15

His Pro Ala Ala Asn Asp Pro Ser Ala Ala Met Ser Ala Ala Gly Ala 20 25 30

Arg Gly Leu Arg Ala Thr Tyr His Arg Leu Leu Asp Lys Val Glu Leu 35 40 45

Met Leu Pro Glu Lys Leu Arg Pro Leu Tyr Asn His Pro Ala Gly Pro 50 55 60

Arg Thr Val Phe Phe Trp Ala Pro Ile Met Lys Trp Gly Leu Val Cys 65 70 75 80

Ala Gly Leu Ala Asp Met Ala Arg Pro Ala Glu Lys Leu Ser Thr Ala 85 90 95

Gln Ser Ala Val Leu Met Ala Thr Gly Phe Ile Trp Ser Arg Tyr Ser

1515

100 105 110 Leu Val Ile Ile Pro Lys Asn Trp Ser Leu Phe Ala Val Asn Phe Phe 115 120 125 Val Gly Ala Ala Gly Ala Ser Gln Leu Phe Arg Ile Trp Arg Tyr Asn 135 140 Gln Glu Leu Lys Ala Lys Ala His Lys 150 <210> 1439 <211> 343 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (244) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (305) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (325) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (328) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (340) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1439 Trp Ile Gln Arg Ile Arg Ala Arg Gly Lys Thr Asn Leu Arg Arg Thr 1 5 Thr Tyr Leu Val Leu Asp Glu Ala Asp Arg Met Leu Asp Met Gly Phe 20 25 Glu Pro Gln Ile Arg Lys Ile Val Asp Gln Ile Arg Pro Asp Arg Gln

1516

		35					40					45			
Thr	Leu 50	Met	Trp	Ser	Ala	Thr 55	Trp	Pro	Lys	Glu	Val 60	Arg	Gln	Leu	Ala
Glu 65	Asp	Phe	Leu	Lys	Asp 70	Tyr	Ile	His	Ile	Asn 75	Ile	Gly	Ala	Leu	Glu 80
Leu	Ser	Ala	Asn	His 85	Asn	Ile	Leu	Gln	Ile 90	Val	Asp	Val	Cys	His 95	Asp
Val	Glu	Lys	Asp 100	Glu	Lys	Leu	Ile	Arg 105	Leu	Met	Glu	Glu	Ile 110	Met	Ser
Glu	Lys	Glu 115	Asn	Lys	Thr	Ile	Val 120	Phe	Val	Glu	Thr	Lys 125	Arg	Arg	Cys
Asp	Glu 130	Leu	Thr	Arg	Lys	Met 135	Arg	Arg	Asp	Gly	Trp 140	Pro	Ala	Met	Gly
Ile 145	His	Gly	Asp	Lys	Ser 150	Gln	Gln	Glu	Arg	Asp 155	Trp	Val	Leu	Asn	Glu 160
Phe	Lys	His	Gly	Lys 165	Ala	Pro	Ile	Leu	Ile 170	Ala	Thr	Asp	Val	Ala 175	Ser
Arg	Gly	Leu	Asp 180	Val	Glu	Asp	Val	Lys 185	Phe	Val	Ile	Asn	Tyr 190	Asp	Tyr
Pro	Asn	Ser 195	Ser	Glu	Asp	Tyr	Ile 200	His	Arg	Ile	Gly	Arg 205	Thr	Ala	Arg
Ser	Thr 210	Lys	Thr	Gly	Thr	Ala 215	Tyr	Thr	Phe	Phe	Thr 220	Pro	Asn	Asn	Ile
Lys 225	Gln	Val	Ser	Asp	Leu 230	Ile	Ser	Val	Leu	Arg 235	Glu	Ala	Asn	Gln	Ala 240
Ile	Asn	Pro	Xaa	Leu 245	Leu	Gln	Leu	Val	Glu 250	Asp	Arg	Gly	Ser	Gly 255	Arg
Ser	Arg	Gly	Arg 260	Gly	Gly	Met	Lys	Asp 265	Asp	Arg	Arg	Asp	Arg 270	Tyr	Ser
Ala	Gly	Lys 275	Arg	Gly	Gly	Phe	Asn 280	Thr	Phe	Arg	Asp	Arg 285	Glu	Asn	Tyr
Asp	Arg 290	Gly	Tyr	Ser	Ser	Leu 295	Leu	Lys	Arg	Asp	Phe 300	Gly	Ala	Lys	Thr
Xaa	Asn	Glv	Glv	Tvr	Ser	Ala	Cvs	Lvs	Phe	Thr	Asn	Glv	Ser	Phe	Glv

1517

305 310 315 320

Ser Asn Phe Gly Xaa Cys Trp Xaa Ser Gly Pro Val Leu Gly Leu Gly 325 330 335

Ile Pro Thr Xaa Ala Leu Pro 340

<210> 1440

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1440

Ile Cys Val Ser Ala Arg Arg Ala Leu Ser Gly Leu Glu His Gly Leu 1 5 10 15

Gly Trp Glu Arg Val Trp Glu Lys Met Gly Asn Lys Glu Pro Gly Ser 20 25 30

His Gly His Arg Ser Asp Ala Asp Pro Ser Arg Phe Ser Pro Val Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Pro Pro Ala Val Gln Leu Gly Val Trp Arg Glu Glu Gly Arg Gly Gly 50 55 60

Ser Cys Pro Phe Ser Trp Gly Arg Gly Pro Val Ser Ser Thr Trp Leu 65 70 75 80

Phe Pro Lys Gly Ser Lys Arg Glu Gly Leu Gly Glu Lys Thr Met Glu 85 90 95

Arg Gly Pro Ala Lys Glu Asn Arg Glu Glu Val Ser Gly Leu Ile Ser 100 105 110

Leu Leu Ser Arg Cys Ser Gly Ser Leu Ile 115 120

<210> 1441

<211> 74

<212> PRT

<213> Homo sapiens

<400> 1441

Gly His Arg His Thr Pro Pro His Leu Ala Asn Phe Tyr Tyr Phe Phe 1 5 10 15

1518

Cys Arg Asp Glu Val Ser Leu Cys Pro Gly Trp Ser Gln Thr Pro Val 20 25 30

Leu Lys Gln Ser Ser His Leu Gly Ser Leu Ser Ala Gly Ile Ile Gly 35 40 45

Met Ser His Arg Ala Arg Pro His Val Cys Met Leu Lys Val Leu Arg 50 55 60

Ile Pro Met Glu Asn Lys Phe Asp Phe Ala 65 70

<210> 1442

<211> 103

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1442

Ala Xaa Xaa His Gln Pro Ser Leu Lys Gly Thr Lys Ala Gly Ala Pro
1 5 10 15

Pro Arg Cys Gly Arg Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu 20 25 30

Phe Gly Thr Arg Glu Ala Glu Ala Gly Val Gln Trp Cys Asp Leu Gly 35 40 45

Ser Leu Gln Pro Leu Pro Pro Arg Phe Gln Gln Phe Ser Cys Leu Ser 50 55 60

Leu Pro Ser Gly Trp Asp Asp Arg Leu Pro Ser Cys Leu Thr Ser 65 70 75 80

Phe Cys Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Trp Pro Gly Trp 85 90 95

Ser Gln Thr Pro Asp Leu Arg 100

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<210> 1443
<211> 106
<212> PRT
<213> Homo sapiens
<220>
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<222> (48)
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<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 1443
Leu His Ala Ala Cys Ala Ala Met Ser Leu Val Ile Pro Glu
Lys Phe Gln His Ile Leu Arg Val Leu Asn Thr Asn Ile Asp Gly Arg
Arg Lys Ile Ala Phe Ala Ile Thr Ala Ile Lys Gly Val Gly Arg Xaa
                             40
Tyr Ala His Val Xaa Leu Arg Lys Xaa Xaa Ile Asp Leu Thr Xaa Arg
                        55
Ala Xaa Glu Leu Thr Xaa Asp Xaa Val Glu Arg Val Ile Thr Ile Met
                    70
                                        75
Gln Asn Xaa Arg Gln Tyr Lys Ile Pro Asp Trp Phe Leu Asn Arg Gln
Asn Asp Xaa Xaa Asp Xaa Ser Thr Ser Ser
<210> 1444
<211> 14
<212> PRT
<213> Homo sapiens
<400> 1444
Pro Val Trp Pro Lys Trp Ser Gly Trp Pro Leu Ala Leu Pro
         5
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<210> 1445
<211> 126
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (119)
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<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (124)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1445
Phe Leu Arg Leu Val Leu Gly Leu Leu Ile Gly Arg Cys Leu Gln Glu
     5
                           10
Met Leu Lys Leu Gly Thr Leu Pro Pro Thr Ser Lys Pro Gln Leu Leu
            20
Cys Gln Met Val Ser Leu Lys Ile Ser Ala Cys Leu Thr Thr Lys Gly
                            40
Lys Tyr Val Val Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys
                       55
Pro Thr Glu Ile Ile Ala Phe Ser Asp Arg Ala Glu Glu Phe Lys Lys
65
                    70
Leu Asn Cys Gln Val Ile Gly Ala Ser Val Asp Ser His Phe Cys His
Leu Ala Trp Val Asn Thr Pro Xaa Lys Gln Gly Gly Leu Gly Pro Met
                              105
Asn Ile Pro Leu Val Ser Xaa Pro Thr His Xaa Xaa Ser Gly
       115
                                              125
                          120
```

1522

<210> 1446 <211> 97 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (92) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1446 Cys Asp Lys Glu Lys Asn Leu Leu His Val Thr Asp Thr Gly Val Gly Met Thr Arg Glu Glu Leu Val Lys Asn Leu Gly Thr Ile Ala Lys Ser Gly Thr Ser Glu Phe Leu Asn Lys Met Thr Glu Ala Gln Glu Asp Gly 35 40 Gln Ser Thr Ser Asp Leu Ile Gly Gln Phe Gly Val Gly Phe Tyr Ser 55 Ala Phe Leu Val Ala Asp Lys Val Ile Val Thr Ser Lys His Asn Asn 65 70 75 Asp Thr Gln His Ile Trp Glu Ser Asp Ser Asn Xaa Phe Ser Val Asn 90 Cys

<210> 1447

<211> 47

<212> PRT

<213> Homo sapiens

<400> 1447

His Ser Arg His Arg Gly Val Phe Leu Thr Pro Leu Leu Ala Met Ser 1 5 10 15

Ser His Lys Thr Phe Arg Ile Lys Arg Phe Leu Ala Lys Lys Gln Lys 20 25 30

Gln Asn Arg Pro Ile Pro Gln Trp Ile Arg Met Lys Thr Gly Lys 35 40 45

1523

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<210> 1448
<211> 106
<212> PRT
<213> Homo sapiens
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<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1448
Val Phe Arg Val Glu Ala Trp Arg Thr Ser Gly Glu Thr Pro Ala Ile
Ser Pro Ser Lys Arg Ala Arg Pro Ala Glu Val Gly Gly Met Gln Leu
Arg Phe Ala Arg Leu Ser Glu His Ala Thr Ala Pro Thr Arg Gly Ser
                             40
Ala Arg Ala Ala Gly Tyr Asp Leu Tyr Ser Ala Tyr Asp Tyr Thr Ile
                        55
Pro Pro Met Glu Lys Ala Val Val Lys Thr Asp Ile Gln Ile Ala Leu
                    70
Pro Ser Gly Cys Xaa Gly Arg Val Ala Pro Arg Ser Gly Leu Ala Ala
Lys His Phe Ile Asp Val Gly Xaa Val Ser
<210> 1449
<211> 60
<212> PRT
<213> Homo sapiens
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (41)

<220>

1524

<221> SITE

<222> (44)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1449

Thr Met Ala Val Gly Lys Asn Lys Arg Leu Thr Lys Gly Gly Lys Lys 1 5 10 15

Gly Ala Lys Lys Lys Val Val Asp Pro Phe Phe Lys Lys Asp Trp Tyr
20 25 30

Asp Val Lys Ala Pro Ala Met Phe Xaa Ile Arg Xaa Ile Gly Lys Thr 35 40 45

Leu Val Thr Arg Thr Gln Gly Thr Lys Ile Ala Ser 50 55 60

<210> 1450

<211> 45

<212> PRT

<213> Homo sapiens

<400> 1450

Asn Phe Gly Ser Leu Leu Gly Ala Cys Leu Ile Leu Gln Ile Thr Thr 1 5 10 15

Gly Leu Phe Leu Ala Met His Tyr Ser Pro Asp Ala Ser Thr Ala Phe 20 25 30

Ser Ser Ile Ala His Ile Thr Arg Asp Val Asn Tyr Gly 35 40 45

<210> 1451

<211> 34

<212> PRT

<213> Homo sapiens

<400> 1451

Lys Leu Leu Asp Asp Asn Gly Asn Ile Ala Glu Glu Leu Ser Ile Leu 1 5 10 15

Lys Trp Asn Thr Asp Ser Val Glu Glu Phe Leu Ser Glu Lys Leu Glu 20 25 30

Arg Ile

1525

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<210> 1452
<211> 61
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1452
Pro Arg Val Arg Leu Xaa Asp Glu Thr Asn Ile Cys Asn Gly Lys Pro
Val Asp Gly Leu Thr Thr Leu Arg Asn Gly Thr Leu Val Ala Phe Arg
Gly His Tyr Phe Trp Met Leu Ser Pro Phe Ser Pro Pro Ser Pro Ala
                            40
Arg Arg Ile Thr Glu Val Leu Gly Asn Pro Phe Pro His
     50
                        55
<210> 1453
<211> 44
<212> PRT
<213> Homo sapiens
<400> 1453
Arg Glu Gln Lys Leu Glu Leu His Arg Gly Ala Ala Ala Leu Glu Leu
                5
Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg Gly Cys Ser Glu Pro
             20
                                 25
Arg Ser His His Cys Thr Pro Val Trp Ala Thr Glu
                            40
<210> 1454
<211> 118
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<212> PRT

<220> <221> SITE

<213> Homo sapiens

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<222> (76)
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<222> (106)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1454
Thr Arg Val Ala Pro Ser Val Leu Arg Leu Ala Met Thr Ser Tyr Ser
                  5
                                     10
Tyr Arg Gln Ser Ser Ala Thr Ser Ser Phe Gly Gly Leu Gly Gly Gly
Ser Val Arg Ile Gly Pro Gly Val Ala Phe Arg Ala Pro Ser Ile His
         35
Gly Gly Ser Gly Gly Arg Gly Val Ser Val Ser Ser Ala Arg Phe Val
     50
                         55
Ser Ser Ser Ser Gly Gly Tyr Gly Gly Kaa Gly Gly Val Leu
                                         75
Thr Ala Ser Xaa Gly Leu Leu Ala Gly Asn Glu Lys Leu Thr Met Gln
                 85
Asn Xaa Xaa Thr Ala Trp Leu Leu Xaa Lys Phe Ala Pro Xaa Gly
            100
                               105
Ala Lys Gly Thr Lys Ser
```

1527

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<210> 1455
<211> 48
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1455
Ala Xaa Glu Asn Ser Arg Ile Val Leu Gln Ile Asp Asn Ala Arg Leu
Ala Ala Asp Asp Phe Arg Thr Lys Phe Glu Thr Glu Gln Ala Leu Arg
                                 25
Met Xaa Val Glu Ala Asp Ile Asn Gly Leu Xaa Arg Cys Trp Met Ser
        35
                             40
                                                 45
```

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<210> 1456
<211> 143
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
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1528

<222> (137) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1456 Gly Asp Tyr Ser His Tyr Tyr Thr Thr Ile Gln Asp Leu Arg Asp Lys 5 10 15 Ile Leu Gly Ala Thr Ile Glu Asn Ser Arg Ile Val Leu Gln Ile Asp 25 Asn Ala Arg Leu Ala Ala Asp Asp Phe Arg Thr Lys Phe Glu Thr Glu Gln Ala Leu Arg Met Ser Val Glu Ala Asp Ile Asn Gly Leu Arg Arg 55 Val Leu Asp Glu Leu Thr Leu Ala Arg Thr Asp Leu Glu Met Gln Ile 70 Glu Gly Leu Lys Glu Glu Leu Ala Tyr Leu Lys Lys Asn His Glu Glu 85 90 Glu Ile Ser Thr Leu Arg Gly Gln Val Gly Gln Val Ser Val Glu 100 Val Asp Ser Ala Pro Gly Thr Asp Leu Ala Lys Ile Leu Ser Asp Met 120 Arg Ser Xaa Tyr Glu Val Met Ala Xaa Gln Asn Arg Lys Asp Ala 135 140 <210> 1457 <211> 116 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (21) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1457 Gly Cys Val Gly Val Arg Pro Ser Leu His Pro Ala Thr Ser Thr Ala 5

Ser Gly Ser Ala Xaa Pro Thr Leu Ala Arg Ala Met Ala Ser Val Ser

Glu Leu Ala Cys Ile Tyr Ser Ala Leu Ile Leu His Asp Asp Glu Val

25

1529

35 40 45 Thr Val Thr Glu Asp Lys Ile Asn Ala Leu Ile Lys Ala Ala Gly Val 50 55 Asn Val Glu Pro Phe Trp Pro Gly Leu Phe Ala Lys Ala Leu Ala Asn 70 Val Asn Ile Gly Ser Leu Ile Cys Asn Val Gly Ala Gly Gly Pro Ala 90 Pro Ala Ala Gly Ala Ala Thr Ser Arg Arg Ser Cys Pro Leu His Cys 100 105 Cys Cys Ser Ser 115 <210> 1458 <211> 115 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (47) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1458 Leu Val Pro Asn Ser Ala Arg Ala Ala Ala Ser Ala Ala Asp Ala Ala Ala Met Arg Tyr Val Ala Ser Tyr Leu Leu Ala Ala Leu Gly Gly Asn 20 25 30 Ser Ser Pro Ser Ala Lys Gly Ile Lys Lys Ile Leu Asp Asn Xaa Gly Ile Glu Ala Asp Asp Asp Arg Leu Asn Lys Val Ile Ser Glu Leu Asn Gly Lys Asn Ile Glu Asp Val Ile Ala Gln Gly Ile Gly Lys Leu Ala 65 70 75 Ser Val Pro Ala Gly Gly Ala Val Ala Val Ser Ala Ala Pro Gly Ser

Ala Ala Pro Ala Ala Gly Ser Ala Pro Ala Ala Ala Glu Glu Lys Lys

105

110

85

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Asp Glu Lys
        115
<210> 1459
<211> 132
<212> PRT
<213> Homo sapiens
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<222> (115)
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<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1459
Ala Ser Asp Ala Leu His Ser Leu Ser Ala Pro Val Leu Arg Leu Ser
                                    10
Ser Arg Ser Ala Ala Arg Pro Ala Thr Met Thr Glu Gln Ala Ile Ser
                                 25
Phe Ala Lys Asp Phe Leu Ala Gly Gly Ile Ala Ala Ala Ile Ser Lys
                            40
Thr Ala Val Ala Pro Ile Glu Arg Val Lys Leu Leu Gln Val Gln
     50
                         55
His Ala Ser Lys Gln Ile Ala Ala Asp Lys Gln Tyr Lys Gly Ile Val
65
                     70
Asp Cys Ile Val Arg Ile Pro Lys Glu Gln Gly Val Leu Ser Phe Trp
                                    90
Arg Gly Asn Leu Ala Asn Val Ile Arg Tyr Phe Pro Thr Gln Ala Leu
            100
                    105
                                                    110
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Asn Phe Xaa Phe Lys Asp Lys Tyr Lys Gln Xaa Phe Leu Xaa Gly Val
        115
Xaa Lys His Thr
    130
<210> 1460
<211> 124
<212> PRT
<213> Homo sapiens
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<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (80)
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1532

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<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (121)
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<400> 1460
Xaa Ser Xaa Lys Thr Gly Phe Xaa Asp Trp Ile Ser Val Ala Tyr Tyr
                                    10
Gly Cys Phe Arg Glu Gly Ala Thr Ile Ile Gln Val Gly Lys Leu Ile
             20
Lys Glu Ala Ala Gly Lys Ser Asn Leu Lys Arg Val Thr Leu Glu Leu
Gly Gly Lys Ser Pro Cys Ile Val Leu Ala Asp Ala Asp Leu Asp Asn
                        55
Ala Val Glu Phe Ala His His Gly Val Phe Tyr His Gln Gly Gln Xaa
65
                     70
Cys Ile Ala Ala Xaa Arg Ile Phe Val Glu Glu Ser Ile Tyr Asp Glu
                                     90
Phe Val Arg Arg Ser Val Glu Arg Val Lys Xaa Ile Ser Leu Gly Xaa
            100
                               105
Pro Leu Thr Pro Xaa Val Xaa Xaa Yaa Pro Ser Asp
       115
                           120
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<210> 1461

<211> 179

<212> PRT

<213> Homo sapiens

<220>

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<221> SITE
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<222> (174)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (176)
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<400> 1461
Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Val Val Pro Leu Ala
                                     10
Gly Thr Asn Gly Glu Thr Thr Thr Gln Gly Leu Asp Gly Leu Ser Glu
             20
                                 25
```

1534

Arg Cys Ala Gln Tyr Lys Lys Asp Gly Ala Asp Phe Ala Lys Trp Arg 40 Cys Val Leu Lys Ile Gly Glu His Thr Pro Ser Ala Leu Ala Ile Met Glu Asn Ala Asn Val Leu Ala Arg Tyr Ala Ser Ile Cys Gln Gln Asn 70 75 Gly Ile Val Pro Ile Val Glu Pro Glu Ile Leu Pro Asp Gly Asp His 85 90 Asp Leu Lys Arg Leu Xaa Val Cys Asp Arg Lys Gly Ala Trp Leu Ala Ala Thr Arg Leu Leu Ser Asp His His Ile Tyr Leu Xaa Gly Thr Leu 115 120 Leu Lys Pro Asn Met Val Pro Gln Ala Met Leu Ala Leu Xaa Ser Phe 135 Xaa Met Lys Glu Ile Ala His Gly Glu Pro Val Ser Xaa Ala Val Pro 150 155 Ala Gln Xaa Pro Pro Arg Leu Ser Leu Gly Ile Asn Xaa Xaa Cys Xaa 165 170 Gly Arg Pro

<210> 1462

<211> 31

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (13)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1462

Ala Asn Ser Leu Ala Cys Gln Gly Lys Tyr Thr Pro Xaa Gly Gln Ala 1 5 10 15

Gly Ala Ala Ser Glu Ser Leu Phe Val Ser Asn His Ala Tyr
20 25 30

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<210> 1463
<211> 71
<212> PRT
<213> Homo sapiens
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<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1463
Asp Asp Cys Glu Phe Lys Ala Glu Gly Asn Ser Lys Phe Thr Tyr Thr
Val Leu Glu Asp Gly Cys Thr Lys His Thr Gly Glu Trp Ser Lys Thr
                                  25
Val Phe Glu Tyr Arg Thr Arg Lys Ala Val Arg Leu Pro Ile Val Asp
         35
                              40
Ile Ala Pro Tyr Asp Ile Gly Gly Pro Asp Gln Glu Phe Gly Val Asp
Xaa Gly Pro Val Xaa Phe Leu
<210> 1464
<211> 77
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (10)
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1536

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<223> Xaa equals any of the naturally occurring L-amino acids
 <400> 1464
 Xaa Gly Thr Arg His Xaa Leu Arg Thr Xaa Asn Gln Ser Ser Asp Glu
Leu Gln Leu Ser Met Gly Asn Ala Met Phe Val Lys Glu Gln Leu Ser
                                  25
Leu Leu Asp Arg Phe Thr Glu Asp Ala Lys Arg Leu Tyr Gly Ser Glu
                                                  45
                              40
Ala Phe Ala Thr Asp Phe Gln Asp Ser Ala Ala Ala Lys Lys Leu Ile
                          55
Asn Asp Tyr Val Lys Asn Gly Thr Arg Gly Thr Ile Thr
 65
                     70
<210> 1465
<211> 105
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids
·<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1465
Leu Lys Gly Arg Pro Gly Phe Pro Gly Ser Lys Gly Glu Ala Gly Phe
                                    10
Phe Gly Ile Pro Gly Leu Lys Gly Leu Ala Gly Glu Pro Gly Phe Lys
```

25

30

1537

Gly Ser Arg Gly Asp Pro Gly Pro Pro Gly Pro Pro Pro Val Ile Leu Pro Gly Met Lys Asp Ile Lys Gly Glu Lys Gly Asp Glu Gly Pro Met 55 Gly Leu Lys Gly Tyr Leu Gly Ala Lys Gly Ile Gln Gly Met Pro Gly 70 Ile Pro Xaa Leu Ser Gly Ile Pro Gly Leu Pro Gly Arg Pro Gly His 90 Ile Xaa Gly Ile Lys Gly Xaa Xaa Gly 100 <210> 1466 <211> 36 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (19) <223> Xaa equals any of the naturally occurring L-amino acids Arg Pro Gly Leu Cys Ala Lys Thr Val Phe Lys Ala Leu Gln Ala Pro 10 Ala Leu Xaa Glu Glu His Gly Glu Gly Trp Arg Leu His Pro Trp Gly 25 Val Trp Glu Thr 35 <210> 1467 <211> 82 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (76) <223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1467
Arg Val Pro Ala Met Ala Ala Lys Gly Gly Thr Val Lys Ala Ala Ser
                  5
                                      10
Ala Phe Asn Ala Thr Glu Asp Ala Gln Thr Leu Arg Lys Ala Met Lys
                                  25
Gly Leu Gly Thr Asp Glu Asp Ala Ile Ile Ser Val Leu Ala Tyr Arg
                             40
Asn Thr Ala Gln Arg Gln Glu Ile Arg Thr Ala Leu Gln Glu His His
     50
                          55
Ser Ala Gly Asp Leu Val Leu Arg Asn Gly Pro Xaa Phe Val Xaa Xaa
                                          75
Trp Xaa
<210> 1468
<211> 83
<212> PRT
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1539

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Gly Trp His Leu Gly Pro Pro Gly Ser Trp Cys Trp Trp Ser Xaa Cys
Ile Thr Gly Pro Asn Thr Ser Xaa Cys Cys Trp Thr His Phe Glu Lys
             20
                                 25
Pro Arg Xaa Ile Asp Asn Val Leu Val Ile Phe Ser His Asp Phe Trp
         35
                                                  45
                             40
Ser Thr Glu Ile Asn Gln Leu Ile Ala Gly Val Asn Xaa Cys Pro Val
Leu Xaa Val Phe Phe Pro Phe Ser Ile Gln Leu Phe Pro Asn Xaa Phe
65
                     70
                                         75
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<210> 1469

Pro Xaa Xaa

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<211> 26
<212> PRT
<213> Homo sapiens
<400> 1469
Glu Lys Asp Glu Tyr Ala Cys Arg Val Asn His Val Thr Leu Ser Gln
                                      10
Pro Lys Ile Val Lys Trp Asp Arg Asp Met
             20
<210> 1470
<211> 168
<212> PRT
<213> Homo sapiens
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<223> Xaa equals any of the naturally occurring L-amino acids
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1541

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<212> PRT
<213> Homo sapiens
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<400> 1471
Cys His Leu Asn Ser Ile His Trp Pro Ser Phe Tyr Asn Val Val Thr
 1
                  5
                                     10
                                                          15
Gly Lys Thr Leu Ala Xaa Pro Asn Leu Ile Ala Leu Gln His Ile Pro
             20
Leu Ser Pro Ala Gly Ser Asn Ser Glu Glu Ala Arg Thr Asp Arg Pro
                             40
Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Asp Ala Pro Cys Ser
     50
Gly Ala Leu Ser Ala Ala Gly Val Val Val Thr Arg Ser Val Thr Ala
 65
                     70
                                         75
Thr Leu Ala Ser Ala Leu Ala Xaa Ala Pro Phe Ala Phe Pro Ser
                 85
                                     90
```

1543

Phe Leu Ala Thr Phe Ala Gly Phe Pro Arg Gln Ala Leu Asn Xaa Gly 100 105 Leu Pro Leu Xaa Phe Arg Xaa Ser Ala Val Arg His Leu Asp Pro Lys 120 125 Lys Leu Asp 130 <210> 1472 <211> 179 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (5) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (24) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (25) <223> Kaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (35) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (40) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (51) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (71) <223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 1472
Lys Lys Lys Gly Gly Arg Xaa Xaa Gly Ser Lys Leu Thr Tyr Ala
            20
Cys Met Xaa Arg His Ser Ser Xaa Ile Gly Ser Pro Lys Phe Asn Ser
                           40
Leu Ala Xaa Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr
                       55
Gln Leu Asn Arg Leu Ala Xaa His Pro Xaa Phe Ala Ser Trp Arg Asn
65
                   70
Ser Xaa Lys Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu
                85
Asn Gly Lys Trp Asp Xaa Pro Cys Xaa Gly Ala Leu Xaa Xaa Ala Gly
           100
                              105
```

1546

Val Xaa Val Thr Xaa Xaa Xaa Thr Ala Thr Leu Ala Xaa Ala Leu Ala 115 120 125

Pro Ala Pro Phe Ala Phe Pro Ser Phe Xaa Ala Thr Phe Ala Gly 130 135 140

Phe Pro Arg Gln Ala Xaa Asn Arg Gly Leu Pro Leu Gly Phe Arg Leu 145 150 155 160

Xaa Ala Leu Arg Asp Leu Xaa Pro Gln Lys Asn Leu Ile Arg Gly Asp 165 170 175

Gly Ser Xaa

<210> 1473

<211> 58

<212> PRT

<213> Homo sapiens

<400> 1473

Ile Ala Ser Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met

1 5 10 15

Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala 20 25 30

Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu 35 40 45

Asn Arg Leu Ala Ala His Pro Pro Phe Ala 50 55

<210> 1474

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1474

Ile Ala Ser Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met

1 5 10 15

Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala 20 25 $^{\prime}$ 30

Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu
35 40 45

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Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu
Glu Ala Arg Thr Asp Arg
 65
<210> 1475
<211> 62
<212> PRT
<213> Homo sapiens
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<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (5)
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<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (60)
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<400> 1475
Leu Pro Xaa Ala Xaa Tyr Thr Xaa Xaa Gly Thr Thr Pro His Tyr Arg
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1548

10

1

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Glu Ser Trp Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro Gly Ser Thr
            20
                               25
Asp Asp Leu Glu Asp Pro Lys Leu Thr Tyr Xaa Xaa Met Gln
                      55
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<211> 80
<212> PRT
<213> Homo sapiens
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<222> (44)
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1549

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<210> 1477

<211> 52

<212> PRT

<213> Homo sapiens

<400> 1477

Arg Gln Val Pro His Glu Arg Ala Val Arg Asp Gly Arg Gly Gly 1 5 10 15

Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met Arg Arg His Ser 20 25 30

Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala Val Val Leu Gln 35 40 45

Arg Arg Asp Trp

1550

25

45

110

125

40

Glu Trp Asp Ala Pro Cys Ser Gly Ala Leu Ser Ala Ala Gly Val Val

Val Thr Arg Ser Val Thr Ala Thr Leu Ala Ser Ala Leu Ala Pro Ala 105

Pro Phe Ala Phe Pro Ser Phe Leu Ala Thr Phe Ala Gly Phe Pro

Arg Gln Ala Leu Asn Arg Gly Leu Pro Leu Gly Xaa Arg Phe Lys Cys

120

135

90

<211> 154 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (140) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1478 Ile Ala Ser Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met 5 Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu 50 55 Glu Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly

<210> 1478

Phe Thr Asp Leu Asp Pro Lys Lys Leu Asp 145 150

85

100

115

<210> 1479

<211> 130

<212> PRT

<213> Homo sapiens

<220>

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<400> 1479
Ile Ala Gly Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met
Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala
                                25
Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu
Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu
Glu Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly
                    70
                                         75
Glu Trp Asp Ala Pro Cys Ser Gly Ala Leu Ser Ala Ala Gly Val Val
                 85
Val Thr Arg Ser Val Thr Ala Thr Leu Ala Lys Arg Pro Lys Arg Pro
                                105
Phe Leu Ser Leu Ser Ser Phe Leu Phe Xaa Pro Arg Ser Ala Gly Phe
                            120
Ser Pro
    130
<210> 1480
<211> 131
<212> PRT
<213> Homo sapiens
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<220>
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<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
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<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1480
Ile Ala Ser Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met
                                     10
Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala
Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu
                             40
Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu
                         55
Glu Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly
                     70
Glu Trp Asp Ala Pro Cys Ser Gly Ala Leu Ser Ala Ala Gly Val Val
                 85
                                     90
Val Thr Arg Ser Val Thr Xaa Thr Leu Ala Ser Ala Leu Ala Pro Xaa
            100
                                105
Pro Phe Ala Phe Phe Leu Leu Ser Arg His Gly Arg Pro Ala Xaa Pro
                            120
                                                 125
        115
Xaa Lys Leu
    130
<210> 1481
<211> 112
<212> PRT
<213> Homo sapiens
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<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (88)
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1553

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1481

Xaa Ser Ser Arg Ser Arg Ala Ala Arg Ser Arg Gly Ser Lys Leu Thr
1 5 10 15

Tyr Ala Cys Met Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe 20 25 30

Asn Ser Leu Ala Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly 35 40 45

Val Thr Gln Leu Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp 50 55 60

His Asn Ser Glu Glu Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg 65 70 75 80

Ser Leu Asn Gly Glu Trp Asp Xaa Pro Cys Ser Gly Ala Leu Ser Ala 85 90 95

Ala Gly Val Val Thr Arg Ser Val Thr Ala Thr Leu Ala Ala Pro 100 105 110

<210> 1482

<211> 53

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (26)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (50)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1482

Glu Asn Val Lys Ala Lys Ile Gln Asp Lys Glu Gly Ile Pro Pro Glu

1554

1 10 15 Xaa Ser Arg Glu Leu Asn Leu Cys Leu Xaa Lys Gln Leu Gly Arg Met 20 25 Gly Arg Tyr Phe Val Leu Asn Leu Gln Tyr Phe Lys Arg Gly Ser Tyr 40 Phe Xaa Ile Leu Cys 50 <210> 1483 <211> 61 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (56) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (59) <223> Xaa equals any of the naturally occurring L-amino acids Ala Asn Met Gln Ile Phe Val Lys Thr Leu Thr Gly Lys Thr Ile Thr Leu Glu Val Glu Pro Ser Asp Thr Ile Glu Asn Val Lys Ala Lys Ile 25 Gln Asp Lys Glu Gly Ile Pro Pro Asp Gln Gln Arg Leu Ile Phe Ala 40 Gly Lys Gln Leu Glu Gly Trp Xaa Gln Leu Xaa Gln Thr 50 55 <210> 1484 <211> 27

<210> 1484 <211> 27 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (6)

1555

<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<220>
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<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
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<400> 1484
Gly Glu Gly Pro Thr Xaa Pro Leu Pro Ser Glu Thr Xaa Gly Asp Val
                                      10
Ala Pro Leu Xaa Cys Xaa Xaa Gly Leu Asn Met
             20
<210> 1485
<211> 45
<212> PRT
<213> Homo sapiens
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<222> (30)
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1556

<220> <221> SITE <222> (34) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1485 Phe Leu Ala Ala Gly Asn Pro Leu Arg Trp Pro Xaa Ile Leu Thr Ser 5 Arg Trp Lys Ser Asp Ile Tyr Xaa Arg Lys Ser Asp Gly Xaa Tyr Ile 25 Ile Xaa Leu Lys Arg Thr Trp Glu Lys Leu Leu Gly 40 <210> 1486 <211> 140 <212> PRT <213> Homo sapiens <400> 1486 Pro Arg Val Arg Arg Ala Glu Trp Leu Cys Gly Arg Val Ser Glu Thr Gly Ser Ala Cys Ser Met Ala Asp Gln Leu Thr Glu Glu Gln Ile Ala 25 Glu Phe Lys Glu Ala Phe Ser Leu Phe Asp Lys Asp Gly Asp Gly Thr 35 40 Ile Thr Thr Lys Glu Leu Gly Thr Val Met Arg Ser Leu Gly Gln Asn Pro Thr Glu Ala Glu Leu Gln Asp Met Ile Asn Glu Val Asp Ala Asp 70 Gly Asn Gly Thr Ile Asp Phe Pro Glu Phe Leu Thr Met Met Ala Arg 85 90 Lys Met Lys Asp Thr Asp Ser Glu Glu Glu Ile Arg Glu Ala Phe Arg 105 Val Phe Asp Lys Asp Gly Asn Gly Tyr Ile Ser Ala Ala Glu Leu Arg 120

His Val Met Thr Asn Leu Gly Arg Glu Val Asn Arg 130 135 140 1557

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<210> 1487
<211> 36
<212> PRT
<213> Homo sapiens
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<221> SITE
<222> (8)
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<400> 1487
Xaa Leu Gly Arg Asn Trp Ala Xaa Phe Thr Gly Lys Xaa Val Gly Xaa
                5
                                    10
Ala Ser Xaa Asn Val Tyr Val His Ile Pro His Leu Arg Asn Ser His
             20
                                 25
Glu Lys Xaa Ser
         35
<210> 1488
<211> 34
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<212> PRT

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<213> Homo sapiens
<400> 1488
Ser Gly Pro Leu Trp Ile Leu Gly Asp Val Phe Ile Gly Arg Tyr Tyr
                                      10
Thr Val Phe Asp Arg Asp Asn Asn Arg Val Gly Phe Ala Glu Ala Ala
                                 25
Arg Leu
<210> 1489
<211> 160
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (4)
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<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (160)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1489
Pro Thr Asn Xaa Kaa Lys Ser Xaa Glu Leu His Arg Gly Gly Arg
                                     10
Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Ser Thr
             20
Gln Arg Pro Val Asp Ile Val Phe Leu Leu Asp Gly Ser Glu Arg Leu
                             40
Gly Glu Gln Asn Phe His Lys Ala Arg Arg Phe Val Glu Gln Val Ala
     50
                         55
```

1559

Arg Arg Leu Thr Leu Ala Arg Arg Asp Asp Pro Leu Asn Ala Arg 70 75 Val Ala Leu Leu Gln Phe Gly Gly Pro Gly Glu Gln Gln Val Ala Phe 85 90 Pro Leu Ser His Asn Leu Thr Ala Ile His Glu Ala Leu Glu Thr Thr 105 Gln Tyr Leu Asn Ser Phe Ser His Val Gly Ala Gly Val Val His Ala 120 Ile Asn Ala Ile Val Arg Ser Pro Arg Gly Gly Ala Arg Arg His Ala 130 135 Glu Leu Pro Ser Trp Ser Ser Arg Thr Ala Ser Arg Ala Thr Thr Xaa 145 160 150 155

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<211> 105
<212> PRT
<213> Homo sapiens
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<210> 1490

<221> SITE

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<222> (58)
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<220>
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<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (82)
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<222> (86)
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<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1490
Ala Gln Met Gly Met Leu Lys Gly Pro Leu Leu Asn Lys Phe Leu Thr
                                     10
Thr Ala Lys Asp Lys Asn Arg Trp Glu Asp Xaa Gly Lys Gln Leu Tyr
             20
Asn Val Glu Ala Thr Ser Tyr Xaa Leu Xaa Ala Leu Leu Gln Leu Lys
         35
                             40
Xaa Phe Asp Phe Val Pro Pro Val Val Xaa Xaa Leu Asn Xaa Gln Arg
                                              60
                         55
```

1561

Xaa Tyr Gly Gly Gly Tyr Gly Ser Thr Gln Ala Thr Phe Met Val Phe 65 70 75 80

Gln Xaa Leu Ala Gln Xaa Gln Lys Asp Gly Pro Asp His Gln Ala Leu $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$

Asn Leu Xaa Val Xaa Leu Gln Met Leu 100 105

<210> 1491

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1491

Arg Asn Thr Leu Ile Ile Tyr Leu Asp Lys Val Ser His Ser Glu Asp $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Asp Cys Leu Ala Phe Lys Val His Gln Tyr Phe Asn Val Glu Leu Ile 20 25 30

Gln Pro Gly Ala Val Lys Val Tyr Ala Tyr Tyr Asn Leu Glu Glu Ser 35 40 45

Cys Thr Arg Phe Tyr His Pro Glu Lys Glu Asp Gly Lys Leu Asn Lys 50 55 60

Leu Cys Arg Asp Glu Leu Cys Arg Cys Ala Glu Glu Asn Cys Phe Ile 65 70 75 80

Gln Lys Ser Asp Asp Lys Val Thr Leu Glu Glu Arg Leu Asp Lys Ala 85 90 95

Cys Glu Pro Gly Val Asp Tyr Val Tyr Lys Thr Arg Leu Ala Arg Phe 100 105 110

Lys Leu Ser Asn Asp Phe Asp Arg Val His His Gly His 115 120 125

<210> 1492

<211> 68

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (62)

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<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1492
Arg Pro Thr Arg Pro Ala Leu Ser Ile Ile Ala Leu Glu Ile Gln Ala
Gln Lys Cys Val Glu Leu Thr Glu Gly Ile Glu Cys Leu Gln Thr His
                                 25
Ser Lys Ile Asn Gly Arg Asp Leu Thr Phe Trp Gln Glu Leu Val Ser
         35
                             40
Lys Cys Leu Thr Glu Tyr Ser Ser Lys Gln Ser Gly Ser Xaa Pro Asn
                        55
                                              60
Val Pro Glu Val
 65
<210> 1493
<211> 74
<212> PRT
<213> Homo sapiens
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<400> 1493
Glu Glu Ile Gln Lys His Asn His Ser Lys Ser Thr Trp Xaa Asp Pro
                 5
Xaa Thr Thr Arg Cys Thr Asn Leu Thr Lys Phe Leu Xaa Glu Ala Ser
             20
                                 25
Leu Val Gly Glu Glu Val Leu Arg Gly Thr Ser Leu Glu Val Thr Leu
                            40
Leu Glu Glu Xaa Leu Arg Xaa Val Arg Gly Thr Phe Thr Xaa Xaa Pro
Lys Gly Lys Leu Phe Pro Lys Thr Phe Xaa
                    70
65
<210> 1494
<211> 54
<212> PRT
<213> Homo sapiens
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<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1494
Asp Ala Thr Ser Pro Ile Ile Glu Glu Leu Ile Thr Phe His Asp His
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1564

Ala Leu Ile Ile Ile Phe Leu Ile Cys Phe Leu Val Leu Tyr Ala Leu 20 25 30

Phe Leu Thr Leu Thr Thr Lys Leu Thr Asn Thr Asn Ile Xaa Asp Ala 35 40 45

Xaa Glu Ile Glu Thr Val 50

<210> 1495

<211> 38

<212> PRT

<213> Homo sapiens

<400> 1495

Phe Phe Gly His Pro Glu Val Tyr Ile Leu Ile Leu Pro Gly Phe Gly
1 5 10 15

Ile Ile Ser His Ile Val Thr Tyr Tyr Ser Gly Lys Lys Glu Pro Phe \$20\$ \$25\$ \$30

Gly Tyr Ile Gly Met Val

<210> 1496

<211> 46

<212> PRT

<213> Homo sapiens

<400> 1496

Ala Phe Tyr His Ser Ser Leu Ala Pro Thr Pro Gln Leu Gly Gly His 1 5 10 15

Trp Pro Pro Thr Gly Ile Thr Pro Leu Asn Pro Leu Glu Val Pro Leu 20 25 30

Leu Asn Thr Ser Val Leu Leu Ala Ser Gly Val Ser Ile Thr 35 40 45

<210> 1497

<211> 60

<212> PRT

<213> Homo sapiens

<400> 1497

1565

Ala Gln Val Gly Leu Gln Asp Ala Thr Ser Pro Ile Ile Glu Glu Leu 1 5 10 15

Ile Thr Phe His Asp His Ala Leu Ile Ile Ile Phe Leu Ile Cys Phe 20 25 30

Leu Val Leu Tyr Ala Leu Phe Leu Thr Leu Thr Thr Lys Leu Thr Asn $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Thr Asn Ile Ser Asp Ala Gln Glu Ile Glu Thr Val
50 55 60

<210> 1498

<211> 45

<212> PRT

<213> Homo sapiens

<400> 1498

Thr Tyr Glu Tyr Thr Asp Tyr Gly Gly Leu Ile Phe Asn Ser Tyr Ile
1 5 10 15

Leu Pro Pro Leu Phe Leu Glu Pro Gly Asp Leu Arg Leu Leu Asp Gly 20 25 30

Asp Asn Arg Val Val Leu Pro Ile Glu Ala Pro Phe Val 35 40 45

<210> 1499

<211> 69

<212> PRT

<213> Homo sapiens

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<221> SITE

<222> (63)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1499

His Arg Leu Asp Phe Leu Gln Leu Met Ile Asp Ser Gln Asn Ser Lys
1 5 10 15

Glu Thr Glu Ser His Lys Ala Leu Ser Asp Leu Glu Leu Ala Ala Gln
20 25 30

Ser Ile Ile Phe Ile Phe Ala Gly Tyr Glu Thr Thr Ser Ser Val Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

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Ser Phe Thr Leu Tyr Glu Leu Ala Thr His Pro Asp Val Gln Xaa Lys
     50
                         55
                                              60
Leu Gln Lys Gly Asp
 65
<210> 1500
<211> 35
<212> PRT
<213> Homo sapiens
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Arg Leu Thr Ser Thr Ala Cys Ala Glu Ser Trp Asp Glu Leu Thr Leu
 1
                  5
                                     10
Ala Arg Xaa Asp Leu Glu Xaa Gln Ile Glu Gly Leu Asn Glu Xaa Ala
             20
                                 25
Ser Leu Thr
<210> 1501
<211> 126
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<213> Homo sapiens
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<222> (67)
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<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (76)
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<221> SITE
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1568

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<222> (95)
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<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1501
Phe Xaa Ala Pro Ser Arg Ile Ser Ala Trp Xaa Gly Pro Pro Ala Ser
                                      10
Thr Pro Ala Ser Thr Met Ser Ile Lys Val Thr Gln Lys Ser Tyr Lys
                                 25
Xaa Ser Thr Ser Ser Pro Arg Ala Phe Ser Ser Arg Ser Tyr Thr Asn
         35
                             40
Xaa Pro Gly Ser Arg Ile Asn Xaa Ser Xaa Phe Ser Arg Ile Gly Ser
                         55
Ser Asn Xaa Xaa Ser Gly Leu Gly Gly Gly Tyr Xaa Gly Ala Ser Xaa
Met Xaa Gly Ile Thr Ala Val Thr Val Asn Gln Ser Leu Leu Xaa Pro
                 85
Leu Xaa Leu Glu Val Asp Pro Asn Ile Gln Ala Val Arg Thr Gln Glu
            100
                                105
Lys Glu Gln Ile Xaa Thr Leu Asn Asn Lys Phe Ala Ser Ser
        115
                            120
<210> 1502
<211> 84
<212> PRT
<213> Homo sapiens
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<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>

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<223> Xaa equals any of the naturally occurring L-amino acids
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<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (48)
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<222> (63)
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<221> SITE
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1570

<222> (67) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (72) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (76) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (81) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1502 Gln Arg Asn Ser Xaa Gly Ser Arg Thr Xaa Xaa Ser Arg Xaa Xaa Cys Lys Xaa Val Ala Met Phe Ser Trp Asp Pro Xaa Leu Val Xaa Gly Gly 25 Gly Ala Ser Lys Met Ala Val Ala His Ala Leu Xaa Glu Lys Ser Xaa 35 40 Ala Met Asp Trp Cys Gly Asn Asn Gly His Thr Gly Leu Leu Xaa Arg 55 Ala Leu Xaa Val His Ser Ser Xaa Pro Trp Ile Xaa Lys Leu Trp Gly 65 70 75 Xaa Ser His His <210> 1503 <211> 70 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (69) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

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<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1503
Val Gly Val Leu Gly Leu Asp Leu Trp Gln Val Lys Ser Gly Thr Ile
                  5
                                     10
                                                          15
Phe Asp Asn Phe Leu Ile Thr Asn Asp Glu Ala Tyr Ala Glu Glu Phe
             20
                                 25
Gly Asn Glu Thr Trp Gly Val Thr Lys Ala Ala Glu Lys Gln Met Lys
                             40
Asp Lys Gln Asp Glu Glu Gln Arg Leu Lys Glu Glu Glu Glu Asp Lys
                         55
Lys Arg Lys Glu Xaa Xaa
 65
                     70
<210> 1504
<211> 42
<212> PRT
<213> Homo sapiens
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<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (11)
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<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids
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1572

<400> 1504

```
Asn Thr Leu Xaa Tyr Xaa Met Lys Ala Thr Xaa Ile Leu Leu Xaa
                                     10
Ala Gln Leu Ser Trp Ala Gly Pro Phe His Gln Thr Gly Leu Leu Asp
             20
                                 25
Ser Met Leu Glu His Glu Ala Tyr Xaa Ile
         35
                             40
<210> 1505
<211> 72
<212> PRT
<213> Homo sapiens
<220>
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<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1505
Xaa His Xaa Asp Cys Ser Xaa Pro Ile Val Ala Ala Gly Val Gly Glu
                                     10
```

1573

Phe Glu Ala Gly Ile Ser Lys Asn Gly Gln Thr Arg Glu His Ala Leu 20 25 30

Leu Ala Tyr Thr Leu Gly Val Lys Gln Leu Ile Val Gly Xaa Asn Lys 35 40 45

Met Asp Ser Thr Glu Pro Pro Tyr Ser Gln Lys Arg Tyr Glu Glu Ile 50 55 60

Xaa Lys Glu Val Ser Thr Tyr Xaa
65 70

<210> 1506

<211> 23

<212> PRT

<213> Homo sapiens

<400> 1506

Ala Glu Thr Arg Lys Arg Lys Gly Leu Lys Glu Gly Ile Pro Ala Leu 1 5 10 15

Asp Asn Phe Leu Asp Lys Leu 20

<210> 1507

<211> 87

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (79)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1507

Lys Leu Pro Leu Lys Ala Lys Met Gly Lys Glu Lys Thr His Ile Asn 1 $$ 5 $$ 10 $$ 15

Ile Val Val Ile Gly His Val Asp Ser Gly Lys Ser Thr Thr Gly 20 25 30

His Leu Ile Tyr Lys Cys Gly Gly Ile Asp Lys Arg Thr Ile Glu Lys 35 40 45

Phe Glu Lys Glu Ala Ala Glu Met Gly Lys Gly Ser Phe Lys Tyr Ala 50 55 60

1574

```
Trp Val Leu Asp Lys Leu Lys Ala Glu Arg Glu Arg Gly Ile Xaa Ile
                                          75
Gly Tyr Leu Leu Val Glu Ile
                 85
<210> 1508
<211> 110
<212> PRT
<213> Homo sapiens
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<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
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<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1508
Pro Asp Pro Xaa Ile Phe Ala Pro Pro Ile Ser Ala Pro Pro Pro Ser
Ser Gly Thr Arg Asp Arg Ser Gln Arg Ser Leu Asp His Tyr Glu Pro
             20
                                 25
                                                      30
Pro Val Gln Pro Arg Gly Pro Cys Pro Arg Ser Phe Glu Leu Leu Val
```

40

55

Arg Ala Val Gly Ala Ala Ala Ala Asp Ala Ala Arg Ala His Arg

60

1575

Gln Arg Trp Ser Cys Arg Cys Cys Val Xaa Arg Ala Ala Leu Pro Phe

70 75 65 Val Tyr Arg Pro Arg Lys Glu Ser Ile Pro Lys Met Ile Ser Asn Xaa Gln Val Xaa Ala Ile Gly Pro Thr Val Leu Gln Xaa Gly Lys 105 <210> 1509 <211> 60 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (18) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (27) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (31) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (41) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (43) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (47) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (49) <223> Xaa equals any of the naturally occurring L-amino acids

1576

<400> 1509 Ser Phe Val Glu Leu Pro Leu Ala Ser Ile Val Ser Leu His Ala Ser 10 Ser Xaa Gly Gly Arg Leu Gln Thr Ser Pro Xaa Pro Ile Gln Xaa Thr 20 25 Pro Pro Lys Asp Thr Cys Ser Pro Xaa Leu Xaa Met Ser Leu Xaa Pro 40 Xaa Lys Leu Cys Arg Arg Arg His Gly Pro Trp Tyr 55 <210> 1510 <211> 116 · <212> PRT <213> Homo sapiens <220> <221> SITE <222> (91) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (92) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (108) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (115) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1510 Gly Thr Ser Ser Gln Arg Phe Tyr Lys Glu Asn Leu Gly Gln Gly Trp Met Thr Gln Lys His Glu Arg Met Lys Val Tyr Val Pro Thr Gly 20 Phe Ser Ala Phe Pro Phe Glu Leu Leu His Thr Pro Glu Lys Trp Val 40 35

Arg Phe Lys Tyr Pro Lys Leu Ile Ser Tyr Ser Tyr Met Val Arg Gly

1577

50 55 60 Gly His Phe Ala Ala Phe Glu Glu Pro Glu Leu Leu Ala Gln Asp Ile Arg Lys Phe Leu Ser Val Leu Glu Arg His Xaa Xaa Thr Pro Leu Pro 85 90 Pro Leu Ala Thr Ser Pro His Asn Ala Leu Gln Xaa Phe Leu Gly Glu 105 Asp Asn Xaa Phe 115 <210> 1511 <211> 156 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (104) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (143) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1511 Arg Glu Gln Lys Leu Glu Leu His Arg Gly Xaa Gly Arg Ser Arg Thr 5 10 Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Arg Asp Arg Gly Gly 20 Phe Pro Pro Arg Gly Pro Arg Gly Ser Arg Gly Asn Pro Ser Gly Gly 40 Gly Asn Val Gln His Arg Ala Gly Asp Trp Gln Cys Pro Asn Pro Ser Ile Gly Asp Phe Cys Cys Asp Val Ile Val Cys Arg Gly Cys Gly Asn 65 70 75

```
Gln Asn Phe Ala Trp Arg Thr Glu Cys Asn Gln Cys Gly Asp Arg Gly
Arg Gly Gly Pro Gly Gly Met Xaa Gly Gly Arg Gly Gly Leu Met Asp
                                                     110
            100
                                105
Arg Gly Gly Pro Gly Gly Met Phe Arg Gly Gly Arg Gly Gly Asp Arg
                            120
Gly Gly Phe Arg Gly Gly Arg Gly Met Asp Arg Gly Gly Phe Xaa Gly
Gly Arg Arg Gly Gly Pro Gly Pro Leu Asp Leu
145
                    150
<210> 1512
<211> 102
<212> PRT
<213> Homo sapiens
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<222> (101)
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1579

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1512

Pro Met Arg Arg Pro Arg Gly Glu Pro Ala Pro Gly Pro Arg Asp Arg 1 5 10 15

Leu Arg Glu Arg Pro Ala Gln Gly Pro Gly Ser His Val Arg Val Ala
20 25 30

Pro Leu Ala Thr Val Asn Ile Leu Xaa Ser Leu Cys Gln Leu Arg Cys
35 40 45

Leu Pro Phe Xaa Ala Leu His Phe Val Xaa Ser Pro Gly Phe Ile Xaa 50 55 60

Tyr Ile Ser Gly Thr Pro His Ala Leu Ile Val Arg Arg Tyr Leu Ser 65 70 75 80

Leu Leu Asp Thr Ala Val Glu Leu Xaa Leu Pro Arg Tyr Arg Gly Pro 85 90 95

Arg Leu Pro Arg Xaa Gln 100

<210> 1513

<211> 139

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (131)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1513

Glu Thr Glu Arg Gly Phe Glu Glu Leu Pro Leu Cys Ser Cys Arg Met
1 5 10 15

Glu Ala Pro Lys Ile Asp Ser Ile Ser Glu Arg Ala Gly His Lys Cys
20 25 30

Met Ala Thr Glu Ser Val Asp Gly Glu Leu Ser Gly Cys Asn Ala Ala 35 40 45

Ile Leu Lys Arg Glu Thr Met Arg Pro Ser Ser Arg Val Ala Leu Met 50 55 60

Val Leu Cys Glu Thr His Arg Ala Arg Met Val Lys His His Cys Cys 65 70 75 80

1580

Pro Gly Cys Gly Tyr Phe Cys Thr Ala Gly Thr Phe Leu Glu Cys His Pro Asp Phe Arg Val Ala His Arg Phe His Lys Ala Cys Val Ser Gln 105 110 100 Leu Asn Gly Met Val Phe Cys Pro His Cys Gly Glu Asp Thr Ser Glu 115 120 125 Ala Gln Xaa Val Thr Ile Pro Gly Val Thr Gly 135 <210> 1514 <211> 72 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (19) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (23) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (25) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (30) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (37) <223> Xaa equals any of the naturally occurring L-amino acids <220>

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<400> 1514
Ile Arg His Glu Ser Ile Ser Gly Ala Ser Xaa Lys Asp Ile Val His
                  5
Ser Gly Xaa Ala Tyr Thr Xaa Glu Xaa Ser Ala Arg Gln Xaa Met Arg
             20
Thr Ala Met Lys Xaa Asn Leu Gly Xaa Asp Leu Arg Thr Ala Ser Tyr
                             40
Xaa Asn Ala Ile Xaa Xaa Val Phe Lys Val Tyr Xaa Glu Ala Gly Val
Thr Phe Thr Xaa Met Xaa His Gly
                     70
65
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1582

<210> 1515

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<211> 88
<212> PRT
<213> Homo sapiens
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<222> (82)
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<400> 1515
Leu Tyr Pro Pro Ala Cys Ser Ala Thr Arg Thr Pro Ser Thr Met Thr
          5
                            10
Thr Ser Ala Ser Ser His Leu Asn Lys Gly Ile Lys Gln Val Tyr Met
             20
Ser Leu Pro Gln Gly Glu Lys Val Gln Ala Met Tyr Ile Trp Ile Asp
                             40
Gly Thr Gly Glu Gly Leu Arg Cys Lys Thr Arg Thr Leu Asp Ser Glu
                       55
Pro Lys Cys Val Glu Glu Leu Pro Glu Trp Asn Phe Asp Gly Ser Ser
                                        75
 65
                    70
Thr Xaa Gln Ser Xaa Gly Ser Ser
                85
<210> 1516
<211> 105
<212> PRT
<213> Homo sapiens
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<222> (38)
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<223> Xaa equals any of the naturally occurring L-amino acids
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<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1516
Gly Arg Glu Ser Gln Asp Thr Xaa Phe Xaa Xaa Leu Val Glu Arg Val
Ile Gln Gln Leu Glu Gly Ala Phe Ala Leu Xaa Phe Lys Ser Val His
             20
Phe Pro Gly Gln Ala Xaa Gly Thr Arg Arg Gly Ser Pro Leu Leu Ile
                             40
Gly Val Arg Ser Glu His Lys Leu Ser Thr Asp His Ile Pro Ile Leu
                         55
Tyr Arg Thr Gly Lys Asp Lys Lys Gly Ser Cys Asn Leu Ser Arg Val
65
                     70
                                         75
```

1584

```
Asp Ser Thr Thr Cys Leu Xaa Pro Xaa Glu Glu Lys Ala Xaa Glu Tyr
                 85
                                      90
Tyr Phe Ala Ser Asp Ala Xaa Ala Ala
            100
<210> 1517
<211> 121
<212> PRT
<213> Homo sapiens
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<221> SITE
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<220>
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<221> SITE

1585

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<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1517
Gly Xaa Glu Lys Arg Glu Arg Glu Arg Glu Arg Leu Val Ile Arg Gln
                                    10
Xaa Pro Xaa Val Gln Xaa Leu Gln Ala Tyr Lys Pro Arg Glu Asn Asp
             20
Xaa Leu Ala Leu Glu Lys Ala Asp Val Val Met Val Thr His Gln Ser
Ser Ala Arg Leu Ala Gly Gly Arg Glu Ala Leu Arg Arg Gly Ala Arg
                         55
Leu Val Ser Cys Asp Ser Xaa Xaa Ser Ser Phe Pro Thr Gln Arg Ser
                  70
65
Val Thr Gln Asn Leu Lys Gly Ser Phe Ile Glu Cys Lys Thr Cys Gln
                                     90
Thr Thr Ala Xaa Gly Asn Ser Lys Pro Xaa Phe Ser Xaa Xaa Glu Gly
                              105
Val Phe Val Ser Trp Lys Asn Lys Leu
       115
                           120
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<210> 1518 <211> 146 <212> PRT <213> Homo sapiens

<220>

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Arg Gly Pro Ala Gln Arg Gly Glu Gly Ala Arg Glu Ala Asn Lys Lys
Ile Glu Lys Gln Leu Gln Lys Asp Lys Gln Val Tyr Arg Ala Thr His
                                 25
Arg Leu Leu Leu Gly Ala Gly Glu Ser Gly Lys Ser Thr Ile Val
         35
                             40
                                                 45
Lys Gln Met Arg Ile Leu His Val Asn Gly Phe Asn Gly Asp Ser Glu
                         55
Lys Ala Thr Lys Val Gln Xaa Ile Lys Asn Asn Leu Lys Glu Ala Ile
                     70
                                        75
Glu Thr Ile Val Ala Ala Met Ser Asn Leu Val Pro Pro Val Glu Leu
                 85
Ala Asn Pro Glu Asn Gln Phe Arg Val Asp Tyr Ile Leu Ser Val Met
            100
                                105
Asn Val Pro Asp Phe Xaa Phe Pro Pro Glu Phe Tyr Glu His Ala Lys
                           120
Ala Leu Trp Xaa Asp Glu Xaa Val Arg Xaa Cys Tyr Glu Arg Ser Asn
    130
                        135
                                            140
```

1587

Glu Tyr 145

<210> 1519

<211> 137

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (72)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1519

Asp Ser Gln Arg Gln Ala Thr Lys Asp Ala Gly Val Ile Ala Gly Leu $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Asn Val Leu Arg Ile Ile Asn Glu Pro Thr Ala Ala Ala Ile Ala Tyr 20 25 30

Gly Leu Asp Arg Thr Gly Lys Gly Glu Arg Asn Val Leu Ile Phe Asp $35 \hspace{1cm} 40 \hspace{1cm} 45$

Leu Gly Gly Gly Thr Phe Asp Val Ser Ile Leu Thr Ile Asp Asp Gly 50 55 60

Ile Phe Glu Val Lys Ala Thr Xaa Gly Asp Thr His Leu Gly Gly Glu 65 70 75 80

Asp Phe Asp Asn Arg Leu Val Asn His Phe Val Glu Glu Phe Lys Arg 85 90 95

Lys His Lys Lys Asp Ile Ser Gln Asn Lys Arg Ala Val Arg Arg Leu 100 105 110

Arg Thr Ala Ala Arg Gly Pro Arg Gly Pro Cys Arg Pro Ala Pro Arg 115 120 125

Pro Ala Trp Arg Ser Thr Ser Leu Phe 130 135

<210> 1520

<211> 100

<212> PRT

<213> Homo sapiens

1588

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<222> (16)
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<221> SITE
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<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1520
Cys Arg Lys Ser Ser Trp Lys Arg Trp Trp Pro Gln Ser Lys Leu Xaa
Thr Arg Xaa Ile Val Thr Ile Gly Ile Lys Ala Met Ala Thr Met Asp
Ile Thr Ala Lys Val Thr Val Val Met Glu Asp Met Xaa Tyr Thr Gly
         35
                             40
Tyr Asn Asn Tyr Tyr Gly Tyr Gly Asp Tyr Ser Asn Gln Gln Ser Gly
Tyr Gly Lys Val Ser Arg Arg Gly Gly His Gln Asn Ser Tyr Lys Pro
65
                     70
                                         75
Tyr Leu Asn Tyr Ser Ile Cys Asn Leu Ser Pro Thr Gly Gly Glu Ala
                                     90
Tyr Phe Xaa Ile
            100
<210> 1521
<211> 129
<212> PRT
<213> Homo sapiens
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<220> <221> SITE

1589

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<222> (72)
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<222> (95)
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<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1521
Asp Ala Trp Ala Leu Ala Pro Gly Pro Val Leu Phe Ser Asn Met Val
                  5
Cys Leu Lys Phe Pro Gly Ser Ser Cys Met Ala Ala Leu Thr Val Thr
             20
                                 25
Leu Met Val Leu Asn Ser Pro Leu Ala Leu Ala Gly Asp Thr Arg Pro
                             40
Arg Phe Leu Glu Gln Val Lys His Glu Cys His Phe Phe Asn Gly Thr
     50
                                             60
Glu Arg Val Arg Phe Leu Asp Xaa Tyr Phe Tyr His Gln Glu Glu Tyr
65
                     70
Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr Xaa Leu
Gly Arg Pro Asn Ser Glu Tyr Trp Asn Ser Gln Lys Asp Xaa Xaa Asp
                                                     110
            100
                                105
Arg Ser Gly Pro Arg Trp Thr Pro Thr Ala Xaa Thr Leu Arg Gly Trp
        115
                           120
```

Val

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<210> 1522
<211> 113
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (44)
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<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids
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WO 00/55350

1591

PCT/US00/05882

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<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1522
Xaa Xaa Thr Asp Ser Xaa Arg Pro Asp Ser Arg Val Asp Pro Arg Val
Arg Glu Val Thr Asp Tyr Ala Ile Ala Arg Arg Ile Val Asp Leu His
             20
                                 25
Ser Arg Ile Glu Glu Ser Ile Xaa Asn Ile Tyr Xaa Leu Asp Asp Ile
         35
                             40
                                                  45
Arg Arg Tyr Leu Xaa Tyr Ala Arg Lys Xaa Lys Pro Lys Asn Ser Lys
Xaa Ser Xaa Asp Phe Ile Val Glu Gln Xaa Lys His Leu Arg Pro Xaa
                     70
                                         75
Asp Gly Phe Trp Ser Ser Pro Val Phe Xaa Glu Gly Xaa Ser Cys Gly
                 85
                                     90
                                                          95
Xaa Ile Glu Gly Leu Gly Ser Val Ser Leu Gly Ser Gln Xaa Leu Arg
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1592

100 105 110

Val

<210> 1523

<211> 32

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1523

Pro Cys Lys Gly Ser Ile Ile Thr Trp Ser Leu Ile Arg Asp Leu Xaa 1 5 10 15

Glu Trp Leu His Glu Gly Gln Leu Ala Leu Thr Phe Asn Gln Xaa Asn 20 25 30

<210> 1524

<211> 28

<212> PRT

<213> Homo sapiens

<400> 1524

Pro Cys Lys Gly Ser Ile Ile Thr Cys Ser Leu Asn Arg Asp Leu Tyr 1 5 10 15

Glu Trp Leu His Glu Gly Ser Ala Val Ser Tyr Phe $20 \hspace{1cm} 25 \hspace{1cm}$

<210> 1525

<211> 92

<212> PRT

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<213> Homo sapiens
<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (21)
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<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1525
Xaa Glu Gln Lys Leu Xaa Leu His Arg Gly Gly Arg Ser Arg Thr
                                     10
```

1594

Ser Gly Ser Pro Xaa Leu Xaa Glu Phe Gly Thr Ser Gly Thr Arg Pro
20 25 30

Cys Gly Val Tyr Thr Pro Arg Cys Gly Ser Gly Leu Leu Cys Tyr Pro $35 \hspace{1cm} 40 \hspace{1cm} 45$

Pro Arg Gly Val Glu Lys Pro Leu His Thr Leu Met His Gly Gln Gly 50 55 60

Val Cys Met Glu Leu Ala Xaa Ile Glu Ala Xaa Xaa Glu Ser Leu Xaa 65 70 75 80

Pro Ser Asp Lys Asp Glu Gly Asp His Pro Asn Xaa 85 90

<210> 1526

<211> 154

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (118)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1526

Thr Glu Gln Arg Glu Leu Thr Met Glu Phe Gly Leu Ser Trp Leu Phe 20 25 30

Leu Val Ala Ile Leu Lys Gly Val Gln Cys Glu Val Gln Leu Val Glu 35 40 45

Ser Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys
50 55 60

Thr Val Ser Gly Phe Thr Phe Arg Asn Tyr Ala Met Ser Trp Val Arg 65 70 75 80

Gln Gly Pro Gly Lys Gly Leu Glu Trp Val Ser Ala Ile Asp Gly Ser 85 90 95

1595

Gly Tyr Asn Thr Tyr Tyr Glu Arg Ser Leu Gln Gly Arg Phe Ser Val 100 105 Ser Arg Asp Asn Ser Xaa Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu 120 Gly Ala Glu Asp Thr Ala Ile Tyr Tyr Cys Ala Lys Thr Glu Arg Met Gly Thr Gly Trp Tyr Gly Arg Asn Asp Tyr 145 150 <210> 1527 <211> 135 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (95) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (129) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (133) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (134) <223> Xaa equals any of the naturally occurring L-amino acids Gly Lys Leu Val Arg Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp Pro Arg Val Arg Thr Val Thr Pro Gly Glu Thr Ala Ser Ile Ser Cys 20 25 Arg Ser Ser Gln Thr Leu Leu His Val Asn Gly His Asn Tyr Leu Asp 40 Trp Tyr Met Gln Lys Pro Gly Gln Pro Pro Gln Leu Val Val Tyr Arg 50 55

1596

Gly Ser Asn Arg Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Gly Ser Gly Thr Asp Phe Thr Leu Arg Ile Thr Thr Val Glu Ala Xaa Asp 90 85 Val Gly Val Tyr Tyr Cys Met Gln Ala Leu Gln Ser Pro Tyr Thr Phe 105 Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg Thr Val Gly Cys Thr Ile 120 125 Xaa Leu His Leu Xaa Xaa Ile 130 <210> 1528 <211> 139 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (117) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (137) <223> Xaa equals any of the naturally occurring L-amino acids Arg Glu Gln Lys Leu Glu Leu His Arg Gly Gly Arg Ser Arg Thr 1.0 Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Ser Gly Trp Ala Leu Arg Ile Ser Arg Phe Leu Pro Gly Phe His Ser Phe Ala Pro Cys Thr 35 Val Ala Pro Ser Leu Arg Ala Gln Pro Ala Lys Gln Arg Ala Pro Val 55 Ala Gly Val Met Gln Arg Ala Arg Pro Thr Leu Trp Ala Ala Ala Leu 70 75

Thr Leu Leu Val Leu Leu Arg Gly Pro Pro Val Ala Arg Ala Gly Ala

90

95

1597

Ser Ser Gly Gly Leu Gly Pro Val Val Arg Cys Glu Pro Cys Asp Ala 100 105 110

Arg Ala Leu Ala Xaa Cys Ala Pro Ser Ala Arg Arg Val Arg Arg Asn 115 120 125

Leu Val Arg Gln Ala Gly Leu Ala Xaa Ala Ala 130 135

<210> 1529

<211> 135

<212> PRT

<213> Homo sapiens

<400> 1529

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Ile Asp Asp Thr Asn 1 5 10 15

Ile Thr Arg Leu Gln Leu Glu Thr Glu Ile Glu Ala Leu Lys Glu Glu 20 25 30

Leu Leu Phe Met Lys Lys Asn His Glu Glu Glu Val Lys Gly Leu Gln 35 40 45

Ala Gln Ile Ala Ser Ser Gly Leu Thr Val Glu Val Asp Ala Pro Lys
50 55 60

Ser Gln Asp Leu Ala Lys Ile Met Ala Asp Ile Arg Ala Gln Tyr Asp 65 70 75 80

Glu Leu Ala Arg Lys Asn Arg Glu Glu Leu Asp Lys Tyr Trp Ser Gln \$85\$ 90 95

Gln Ile Glu Glu Ser Thr Thr Val Val Thr Thr Gln Ser Ala Glu Val 100 105 110

Gly Ala Ala Glu Thr Thr Leu Thr Glu Leu Arg Arg Thr Val Gln Ser 115 120 125

Leu Glu Ile Asp Leu Gly Leu 130 135

<210> 1530

<211> 132

<212> PRT

<213> Homo sapiens

1598

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Gln Val Pro Ala Arg Lys Lys Arg Pro Lys Arg Leu Arg Thr Gly Asn Met Val Arg Ser Gly 25 Asn Lys Ala Ala Val Val Leu Cys Met Asp Val Gly Phe Thr Met Ser 40 Asn Ser Ile Pro Gly Ile Glu Ser Pro Phe Glu Gln Ala Lys Lys Val 55 Ile Thr Met Phe Val Gln Arg Gln Val Phe Ala Glu Asn Lys Asp Glu 75 Ile Ala Leu Val Leu Phe Gly Thr Asp Gly Thr Asp Asn Pro Leu Ser 90 Gly Gly Asp Gln Tyr Gln Asn Ile Thr Val His Arg His Leu Met Leu 105 100 Pro Asp Phe Asp Leu Leu Glu Asp Ile Glu Lys Gln Asn Pro Thr Arg 120 Phe Ser Thr Gly 130 <210> 1531 <211> 94 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (18) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (27) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (34) <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1530

1599

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<220>
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<222> (61)
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<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1531
Arg Lys Arg Leu Lys Gly Glu Glu Gln Lys Leu Leu Arg Asn Ala Arg
                 5
                                     10
Arg Xaa Gln Lys Met Ala Cys Gln Met Thr Xaa Asn His Ser Ser Val
             20
                                 25
Ser Xaa Leu Lys Gly Ser Ser Leu Gln Asp Arg Arg Ala Ser Arg Phe
                             40
Leu Ile Lys Ser Val Gln Lys Ser Ser Gly Val Gln Xaa Asp Pro Ser
    50
                         55
Ser Ser Ile Ser Xaa Pro Ser Leu Thr Ala Xaa Trp Ser Xaa Leu Pro
65
                     70
                                         75
Trp His Leu Arg Gly Pro Lys Ala Ala Lys Thr Leu Lys Xaa
                                     90
                 85
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<210> 1532 <211> 153

<212> PRT

<213> Homo sapiens

1600

<400> 1532 Gln Thr Thr Met Cys Tyr Gly Lys Cys Ala Arg Cys Ile Gly His Ser Leu Val Gly Leu Ala Leu Leu Cys Ile Ala Ala Asn Ile Leu Leu Tyr Phe Pro Asn Gly Glu Thr Lys Tyr Ala Ser Glu Asn His Leu Ser Arg Phe Val Trp Phe Phe Ser Gly Ile Val Gly Gly Leu Leu Met Leu 55 60 Leu Pro Ala Phe Val Phe Ile Gly Leu Glu Gln Asp Asp Cys Cys Gly 65 Cys Cys Gly His Glu Asn Cys Gly Lys Arg Cys Ala Met Leu Ser Ser Val Leu Ala Ala Leu Ile Gly Ile Ala Gly Ser Gly Tyr Cys Val Ile 105 Val Ala Ala Leu Gly Leu Ala Glu Gly Pro Leu Cys Leu Asp Ser Leu 115 120 Gly Gln Trp Asn Tyr Thr Phe Ala Ser Thr Glu Gly Gln Val Pro Ser 135 140 Gly Tyr Leu His Met Val Arg Val His <210> 1533 <211> 142 <212> PRT <213> Homo sapiens <400> 1533 Leu Cys Leu Leu Arg Thr Thr Val Thr Glu Val Ser Arg Ala Phe Ser

1601

Leu Ala Asp Glu Leu Ala Leu Val Asp Val Leu Glu Asp Lys Leu Lys 70 Gly Glu Met Met Asp Leu Gln His Gly Ser Leu Phe Leu Gln Thr Pro 90 85 Lys Ile Leu Ala Asp Lys Asp Tyr Ser Val Thr Ala Asn Ser Lys Ile 100 105 110 Val Val Thr Ala Gly Val Arg Gln Glu Gly Glu Ser Arg Leu 115 120 Asn Leu Val Gln Arg Asn Val Asn Val Phe Lys Phe Ile Ile 130 135 140 <210> 1534 <211> 67 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (42) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (48) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (54) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (61) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1534 Ala His Cys His Ala Pro Pro Thr Thr Ala Arg Arg Ala Phe Pro Ile Pro Phe Gly Ser Lys Ser Asn Met Ala Thr Leu Lys Asp Gln Leu Ile 25 Tyr Asn Leu Lys Glu Glu Gln Thr Xaa Gln Asn Lys Ile Thr Xaa

40

35

```
Val Gly Val Gly Ala Xaa Gly Met Ala Cys Ala Ile Xaa Ile Leu Met
Lys Asp Leu
 65
<210> 1535
<211> 72
<212> PRT
<213> Homo sapiens
<220>
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<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1535
Xaa Lys Lys Tyr Leu Gly Asp Xaa Ile Glu Gly Thr Pro Ala Gly Thr
Gly Pro Glu Phe Pro Gly Leu Leu Thr Cys Leu Leu Gln Leu Ile Met
                                25
Val Thr Asn Lys Ala Ile Ala Ser Gln Ile Ser Gln Ile Lys His Phe
         35
                             40
Phe His Cys Ile Leu Val Val Cys Pro Asn Ser Ser Met Tyr Leu
Ile Met Ser Gly Ser Ile Leu His
<210> 1536
<211> 80
<212> PRT
<213> Homo sapiens
<220>
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<222> (20)
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<222> (45)
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<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1536
Gly Lys Ala Trp Gly Ser Glu Cys Glu Lys Cys Pro Leu Pro Gly Thr
                 5
                                    10
Glu Ala Phe Xaa Glu Ile Cys Pro Ala Gly His Gly Tyr Thr Tyr Ala
Ser Ser Asp Ile Arg Leu Ser Met Arg Lys Ala Glu Xaa Glu Glu Leu
                             40
Ala Xaa Pro Pro Arg Glu Gln Gly Gln Xaa Ser Ser Trp Ala Leu Pro
     50
                         55
Gly Pro Thr Xaa Lys Gln Pro Leu Arg Val Arg His Gly His Leu Ala
 65
                     70
                                         75
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<210> 1537
<211> 137
<212> PRT
<213> Homo sapiens
<220>
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<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
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<222> (74)
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<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1537
Arg Lys Gln Cys Gln Asp Ser Lys Asp Ser Asn His Leu Pro Lys Met
                                     10
Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly Gly Thr Ser
                                 25
Gly Gln Tyr Tyr Asp Tyr Asp Phe Pro Leu Ser Ile Tyr Gly Gln Ser
         35
                             40
                                                 45
Ser Pro Asn Cys Ala Pro Glu Cys Asn Xaa Pro Glu Ser Tyr Pro Ser
     50
                         55
Ala Met Tyr Cys Asp Glu Leu Lys Leu Xaa Ser Val Pro Met Val Pro
                                         75
Pro Gly Ile Lys Tyr Leu Tyr Leu Arg Asn Asn Gln Ile Asp His Ile
                 85
                                     90
Asp Glu Lys Ala Phe Glu Asn Val Thr Asp Leu Gln Trp Leu Ile Leu
            100
                                105
Asp His Asn Leu Leu Glu Asn Ser Lys Xaa Lys Gly Arg Val Phe Ser
                                                125
       115
                            120
```

1605

Lys Leu Lys Gln Leu Xaa Lys Xaa Xaa 130 135

<210> 1538

<211> 144

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (134)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (137)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1538

Tyr Gln Val Tyr Ser Lys Ile Gln Ala Thr Asn Thr Trp Leu Phe Leu

1 10 15

Ser Ser Cys Asn Gly Asn Glu Thr Ser Leu Trp Asp Cys Lys Asn Trp 20 25 30

Gln Trp Gly Gly Leu Thr Cys Asp His Tyr Glu Glu Ala Lys Ile Thr

Cys Ser Ala His Arg Glu Pro Arg Leu Val Gly Gly Asp Ile Pro Cys 50 55 60

Ser Gly Arg Val Glu Val Lys His Gly Asp Thr Trp Gly Ser Ile Cys 65 70 75 80

Asp Ser Asp Phe Ser Leu Glu Ala Ala Ser Val Leu Cys Arg Glu Leu 85 90 95

Gln Cys Gly Thr Val Val Ser Ile Leu Gly Gly Ala His Phe Gly Glu 100 105 110

Gly Met Asp Arg Ser Gly Leu Lys Asn Ser Ser Val Glu Gly His Glu
115 120 125

Ser Pro Ser Phe Ile Xaa Pro Val Xaa Thr Pro Pro Lys Arg Asn Leu 130 135 140

1606

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<211> 85
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Asn Met Ala Gly Val Glu Glu Val Ala Ala Ser Gly Ser His Leu Asn
Gly Asp Leu Asp Pro Asp Asp Arg Glu Glu Gly Ala Ala Ser Thr Ala
Glu Glu Xaa Ala Lys Lys Lys Arg Arg Lys Lys Lys Ser Lys Gly
                             40
Pro Ser Ala Gly Lys Glu Ser Phe Met Phe Ser Gln Ser Pro Pro Gly
     50
                         55
Thr Ala Glu Leu Phe Gly Ser Gly Pro Leu Arg Gly Pro Gly Pro Gly
                                         75
Pro Gln Ser Pro Asp
                 85
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<210> 1539

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Arg Xaa Arg Val Pro Xaa Asn Trp Lys Met Xaa Phe Glu Pro Ile Ser
             20
                                 25
Ser Thr Lys Phe
         35
<210> 1541
<211> 144
<212> PRT
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<22	3> X	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<22 <22	0> 1> s	ITE													
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<22															
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	•		quals	s any	y of	the	nati	ural	ly o	ccur	ring	L-a	mino	acio	ds
	0> 1: Thr		Ala	Xaa	Glv	Glu	Ara	Ala	Cvs	Ara	Ser	Thr	Leu	Val	Asp
1				5	2		J		10	,				15	_
Pro	Lys	Xaa	Val 20	Xaa	Thr	Val	Phe	Ser 25	Leu	Gly	Ala	Cys	Met 30	Glu	Gly
Leu	Asn	Ile	Leu	Leu	Asn	Ara	Leu	Leu	Glv	Ile	Ser	Leu	Tvr	Ala	Glu
		35				J	40		2			45	1		
Gln	Pro 50	Ala	Lys	Gly	Glu	Val 55	Trp	Ser	Glu	Asp	Val 60	Arg	Lys	Leu	Ala
Val 65	Val	His	Glu	Ser	Glu 70	Gly	Leu	Leu	Gly	Tyr 75	Ile	Tyr	Cys	Asp	Phe 80
	G1 =	A == ==	חות	7		Dwa	TI i a	Cl n	2		ui a	Dho	mh∽	Tlo	
Pile	GIII	Arg	Ala	85	гуя	PIO	HIS	GIN	90	Cys	птъ	rne	1111	95	AIG
Gly	Gly	Arg	Leu 100	Lys	Gly	Arg	Trp	Glu 105	Thr	Xaa	Gln	Leu	Pro 110	Val	Val
Ser	Ser	Tyr	Ala	Gly	Ile	Phe	Pro	Val	Pro	Xaa	Arg		Phe	Ser	Asn
		115					120					125			
Phe	Gly 130	Xaa	Xaa	Leu	Gly	Met 135	Met	Gly	Lys	Pro	Phe 140	Pro	Gly	Xaa	Gly

1609

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Lys Phe Gly Ala Asp Ala Arg Ala Leu Met Leu Gln Gly Val Asp Leu

<213> Homo sapiens

5

<400> 1543

1610

Leu Ala Asp Ala Val Ala Val Thr Met Gly Pro Lys Gly Arg Thr Val 20 Ile Ile Glu Gln Ser Trp Gly Ser Pro Lys Val Thr Lys Asp Gly Val 35 40 Thr Val Ala Lys Ser Ile Asp Leu Lys Asp Lys Tyr Lys Asn Ile Gly 55 Ala Lys Leu Val Gln Asp Val Ala Asn Asn Thr Asn Glu Glu Ala Gly 70 75 Asp Gly Thr Thr Ala Thr Val Leu Ala Arg Ser Ile Ala Lys Glu 90 Gly Phe Glu Lys Ile Ser Lys Gly Ala Asn Pro Val Glu Ile Arg Arg 100 105 Gly Val Met Leu Ala Val Asp Ala Val Ile Ala Glu Leu Lys Lys Gln 120 Ser Lys Pro Val Thr Thr Pro 130 <210> 1544 <211> 84 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (68) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (72) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (77) <223> Xaa equals any of the naturally occurring L-amino acids <220>

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1611

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Pro Ser Ala Ala Ala Gly Asp Leu Gln Arg Thr Ala Ala Met Gly Ala
His Leu Val Arg Arg Tyr Leu Gly Asp Ala Ser Val Xaa Pro Asp Pro
             20
                                 25
Leu Gln Met Pro Thr Phe Pro Pro Asp Tyr Gly Phe Pro Glu Arg Lys
                             40
Xaa Arg Xaa Met Val Ala Thr Xaa Xaa Xaa Met Met Asp Ala His Xaa
Ser Ser Xaa Cys Gly Xaa Thr Ala Pro Thr Asn Ser Ser Gly Cys Ser
65
                     70
Ile Xaa Thr Leu Xaa Leu Pro Pro Leu Pro Trp Leu Ala Asn Gln Glu
                 85
                                     90
Arg Asp Lys Xaa Glu Xaa Xaa Gln Thr Pro Xaa Xaa Phe Xaa Xaa Pro
            100
                                105
                                                    110
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1614

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<213> Homo sapiens
<400> 1547
Lys Val Ser Ala Val Met Ala Phe Leu Ala Ser Gly Pro Tyr Leu Thr
His Gln Gln Lys Val Leu Arg Leu Tyr Lys Arg Ala Leu Arg His Leu
                                25
Glu Ser Trp Cys Val Gln Arg Asp Lys Tyr Arg Tyr Phe Ala Cys Leu
                           40
Met Arg Ala Arg Phe Glu Glu His Lys Asn Glu Lys Asp Met Ala Lys
     50
Ala Thr Gln Leu Lys Glu Ala Glu Glu Phe Trp Tyr Arg Gln
His Pro Gln Pro Tyr Ile Phe Pro Asp Ser Pro Gly Gly Thr Ser Tyr
                       90
Glu Arg Tyr Asp Cys Tyr Lys Val Pro Glu Trp Cys Leu Asp Asp Trp
           100
                              105
                                                  110
His Pro Ser Glu Lys Ala Met Tyr Pro Asp Tyr Phe Ala Lys Arg Glu
Gln Trp Lys Lys Leu Arg Glu Gly Lys Leu Gly Thr Arg Gly
                       135
<210> 1548
<211> 98
<212> PRT
<213> Homo sapiens
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<223> Xaa equals any of the naturally occurring L-amino acids

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1616

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Xaa Thr

<210> 1549 <211> 138 <212> PRT

<213> Homo sapiens

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Gly Cys Ser Leu Glu Gln Arg Ser Phe Ile Ser Val Arg Leu Leu Ser
                                    10
           5
Tyr Leu Ser Ala Cys Arg His Pro Met Glu Asp Ser Met Asp Met Asp
             20
Met Ser Pro Leu Arg Pro Gln Asn Tyr Leu Phe Gly Cys Glu Leu Lys
                             40
Ala Asp Lys Asp Tyr His Phe Lys Val Asp Asn Xaa Glu Asn Glu His
                         55
Gln Leu Ser Leu Arg Thr Val Xaa Xaa Gly Ala Gly Ala Lys Asp Glu
                                        75
65
                     70
                                                             80
```

1618

Leu His Ile Val Glu Ala Glu Ala Met Asn Tyr Glu Gly Ser Pro Ile 85 90 95

Lys Val Thr Leu Ala Thr Leu Lys Met Ser Val Gln Pro Thr Val Phe 100 105 110

Pro Leu Gly Ala Leu Asn Asn Thr Thr Xaa Xaa Leu Lys Val Glu Xaa 115 120 125

Trp Phe Arg Ala Met Pro Ile Xaa Gly Gln 130 135

<210> 1550

<211> 51

<212> PRT

<213> Homo sapiens

<400> 1550

Thr Leu Ala Phe Phe Leu Ile Pro Cys Ile Gly Ser Pro Ala Cys Pro 1 5 10 15

Thr Met Ser Asp Ala Ala Val Asp Thr Ser Ser Glu Ile Thr Thr Lys
20 25 30

Asp Leu Lys Glu Lys Glu Val Val Glu Glu Ala Glu Met Glu Glu 35 40 45

Thr Pro Cys 50

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<211> 73

<212> PRT

<213> Homo sapiens

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Lys Ala Xaa Ser Val Xaa Leu Tyr Lys Val Arg Leu Gln Val Pro Val
                 5
Arg Asn Ser Arg Val Asp Pro Arg Val Arg Xaa Gly Glu Gln Val
                                 25
Ser Ser Thr Ile Xaa Gly Leu Ser Gly Pro Pro Ser Arg Arg Gly Pro
                             40
                                                 45
Phe Pro Leu Ala Trp Val Ile Leu Phe Leu Leu Glu Ala Gln Xaa Gly
     50
                         55
                                             60
Pro Trp Xaa Leu Leu Pro Ser Ala His
 65
                    70
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Phe Val Pro Thr Asn Asp Ala Phe Lys Gly Met Thr Ser Glu Glu Lys
             20
Glu Ile Leu Ile Arg Asp Lys Asn Ala Leu Gln Asn Ile Ile Leu Tyr
                             40
His Leu His Gln Glu Phe Ser Leu Glu Lys Asp Leu Asn Leu Val Leu
                         55
                                              60
Leu Thr Phe Leu Lys Thr Thr Gln Gly Ser Lys Ile Phe Leu Glu Gly
 65
                     70
                                         75
```

1621

Ser Glu Met Val Thr Leu Leu Val Asn Gly Phe Gly Asn Pro Lys Xaa 90 Ser Asp Ile His Gly Pro Pro Xaa Val Val Ile Ser Cys Cys Arg Leu 100 105 Asn Xaa Xaa Phe Pro Ala Xaa Thr Pro Phe Gly Xaa Gly Ser Thr Gly 120 125 115 Xaa Asp Thr 130 <210> 1553 <211> 106 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (55) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (94) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (103) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1553 Trp Ile Xaa Arg Ala Ala Gly Ile Arg His Glu Val Ala Asp Thr Met 10 Leu Pro Pro Met Ala Leu Pro Ser Val Ser Trp Met Leu Leu Ser Cys 20 Leu Met Leu Leu Ser Gln Val Gln Gly Glu Pro Gln Arg Glu Leu 35

Pro Ser Ala Arg Ile Arg Xaa Pro Lys Gly Ser Lys Ala Tyr Gly Ser

1622

50 55 60

His Cys Tyr Ala Leu Phe Leu Ser Pro Lys Ser Trp Thr Asp Ala Asp 65 70 75 80

Leu Ala Cys Gln Lys Arg Pro Ser Gly Asn Leu Val Ser Xaa Leu Ser 85 90 95

Gly Ala Glu Gly Ser Phe Xaa Pro Pro Trp
100 105

<210> 1554

<211> 117

<212> PRT

<213> Homo sapiens

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<221> SITE

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1554

Ala Thr Phe Pro Arg Glu Trp Leu Cys Asp Arg His Leu Arg Glu Lys
1 5 10 15

Met Phe Ser Ser Val Ala His Leu Ala Arg Ala Asn Pro Phe Asn Thr
20 25 30

Pro His Leu Gln Leu Val His Asp Gly Leu Gly Asp Leu Arg Ser Ser 35 40 45

Ser Pro Gly Pro Thr Gly Gln Pro Arg Arg Pro Arg Asn Leu Ala Ala 50 55 60

Ala Ala Val Glu Glu Gln Tyr Ser Cys Asp Tyr Gly Ser Gly Arg Phe
65 70 75 80

Phe Ile Leu Cys Gly Leu Gly Gly Ile Ile Ser Cys Gly Thr Thr His
85 90 95

Thr Ala Leu Val Pro Leu Asp Leu Val Lys Cys Arg Xaa Arg Phe Val 100 105 110

Phe Ala Cys Trp Thr 115

1623

<211> 164 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (79) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (86) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (125) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1555 Glu Lys Lys Val Glu Arg Gln Thr Glu Leu Lys Arg Lys Phe Glu Gln 10 Met Lys Gln Asp Arg Ile Thr Arg Tyr Gln Gly Val Asn Leu Tyr Val 25 Lys Asn Leu Asp Asp Gly Ile Asp Asp Glu Arg Leu Arg Lys Glu Phe Ser Pro Phe Gly Thr Ile Thr Ser Ala Lys Val Met Met Glu Gly Gly 50 Arg Ser Lys Gly Phe Gly Phe Val Cys Phe Ser Ser Pro Glu Xaa Ala Thr Lys Ala Val Thr Xaa Met Asn Gly Arg Ile Val Ala Thr Lys Pro 85 90 Leu Tyr Val Ala Leu Ala Gln Arg Lys Glu Glu Arg Gln Ala His Leu 100 105 Thr Asn Gln Tyr Met Gln Arg Met Ala Ser Val Arg Xaa Val Pro Asn 120 Pro Val Ile Asn Pro Tyr Gln Pro Ala Pro Pro Ser Gly Tyr Phe Met 135 Ala Ala Ile Pro Gln Thr Gln Asn Val Leu His Thr Ile Leu Leu Ala 145 150 155

Lys Leu Leu Asn

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1625

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Phe Ser Val Ile Ala Asp Pro Arg Gly Asn Thr Leu Gly Arg Gly Thr 100 105 110

Thr Ile Thr Leu Val Leu Lys Glu Glu Ala Ser Asp Tyr Leu Glu Leu 115 120 125

Asp Thr Ile Lys Asn Leu Val Lys Lys Tyr Ser Gln Phe Ile Asn Phe 130 135 140

Glu Glu Glu Gly Ala Ala 165

<210> 1557

<211> 127

<212> PRT

<213> Homo sapiens

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<400> 1557
Xaa Asn Val Val Glu Ala Gln Phe Asp Ser Arg Val Arg Ala Thr Gly
                  5
                                      10
                                                          15
His Ser Xaa Xaa Xaa Tyr Asn Lys Trp Glu Thr Ile Glu Ala Trp Thr
             20
                                  25
Gln Gln Val Ala Thr Xaa Asn Pro Ala Leu Ile Ser Arg Ser Val Ile
                             40
Gly Thr Thr Phe Glu Gly Arg Ala Ile Tyr Leu Leu Lys Val Gly Lys
    50
                         55
                                              60
Ala Gly Gln Asn Lys Pro Ala Ile Phe Met Asp Cys Gly Phe Pro Met
65
                     70
                                          75
Pro Xaa Xaa Trp Ile Ser Pro Cys Ile Xaa Pro Val Gly Phe Xaa Lys
                 85
                                      90
```

1628

Xaa Ala Val Pro Phe Leu Xaa Thr Phe Xaa Xaa Xaa Leu Thr As
n Phe 100 $$ 105 $$ 110

Xaa Asn Asn Leu Xaa Phe Tyr Xaa Pro Ala Leu Trp Pro Gln Tyr 115 120 125

<210> 1558

<211> 109

<212> PRT

<213> Homo sapiens

<220>

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<222> (80)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (107)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1558

Lys Ala Gly Ala Ala Ala Gly Gly Pro Gly Val Ser Gly Val Cys Val
1 5 10 15

Cys Lys Ser Arg Tyr Pro Val Cys Gly Ser Asp Gly Thr Thr Tyr Pro 20 25 30

Ser Gly Cys Gln Leu Arg Ala Ala Ser Gln Arg Ala Glu Ser Arg Gly
35 40 45

Glu Lys Ala Ile Thr Gln Val Ser Lys Gly Thr Cys Glu Gln Gly Pro

Ser Ile Val Thr Pro Pro Lys Asp Ile Trp Asn Val Thr Gly Ala Xaa 65 70 75 80

Val Tyr Leu Ser Cys Glu Val Ile Gly Ile Pro Thr Pro Val Leu Ile 85 90 95 1629

Trp Asn Lys Val Xaa Arg Gly His Tyr Gly Xaa Xaa Arg
100 105

<210> 1559

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1559

Gly Leu Arg Gly His Leu Arg Ser Ser Gly Ser Ser Ile Trp Asn Tyr
1 5 10 15

Ile Lys Phe Arg Lys His Val Ser Arg Tyr Asp Ser Arg Thr Thr Ile
20 25 30

Phe Ser Pro Glu Gly Arg Leu Tyr Gln Val Glu Tyr Ala Met Glu Ala 35 40 45

Leu Leu Ala Ala Glu Arg Arg Asn Ile His Lys Leu Leu Asp Glu Val
65 70 75 80

Phe Phe Ser Glu Lys Ile Tyr Lys Leu Asn Glu Asp Met Ala Cys Ser

Val Ala Gly Ile Thr Phe 100

<210> 1560

<211> 159

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (146)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1560

Ser Thr His Ala Ser Ala Ala His Pro Ser Thr Leu Thr His Pro Gln
1 5 10 15

Arg Arg Ile Asp Thr Leu Asn Ser Asp Gly Tyr Thr Pro Glu Pro Asp 20 25 30

1630

Lys Pro Arg Pro Met Pro Met Asp Thr Ser Val Tyr Glu Ser Pro Tyr 35 40 Ser Asp Pro Glu Glu Leu Lys Asp Lys Leu Phe Leu Lys Asp Asp 55 Asn Leu Leu Ile Ala Asp Ile Glu Leu Gly Cys Gly Asn Phe Gly Ser 70 Val Arg Gln Gly Val Tyr Arg Met Arg Lys Lys Gln Ile Asp Val Ala 90 Ile Lys Val Leu Lys Gln Gly Thr Glu Lys Ala Asp Thr Glu Glu Met 100 Met Arg Glu Ala Gln Ile Met His Gln Leu Asp Asn Pro Tyr Ile Val 120 Arg Leu Ile Gly Val Cys Gln Ala Glu Ala Leu Met Leu Val Met Glu 135 140 Met Xaa Gly Ala Gly Ala Ala Gln Val Pro Gly Arg Gln Glu Gly 145 150 155 <210> 1561 <211> 155 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (139) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (140) <223> Kaa equals any of the naturally occurring L-amino acids <400> 1561 Arg Ala His Glu Asn Glu Ile Thr Lys Val Arg Lys Val Thr Phe Asn 10

Gly Leu Asn Gln Met Ile Val Ile Glu Leu Gly Thr Asn Pro Leu Lys 20 25 30

Ser Ser Gly Ile Glu Asn Gly Ala Phe Gln Gly Met Lys Lys Leu Ser

40

35

1631

Tyr Ile Arg Ile Ala Asp Thr Asn Ile Thr Ser Ile Pro Gln Gly Leu 50 55 60

Pro Pro Ser Leu Thr Glu Leu His Leu Asp Gly Asn Lys Ile Ser Arg 65 70 75 80

Val Asp Ala Ala Ser Leu Lys Gly Leu Asn Asn Leu Ala Lys Leu Gly
85 90 95

Leu Ser Phe Asn Ser Ile Ser Ala Val Asp Asn Gly Ser Leu Ala Asn 100 105 110

Thr Pro His Leu Arg Glu Leu His Leu Asp Asn Asn Lys Leu Thr Arg 115 120 125

Val Pro Gly Gly Leu Gln Ser Ile Lys Tyr Xaa Xaa Gly Gly Tyr Leu 130 135 140

His Asn Asn His Ile Ser Val Val Gly Ser Lys 145 150 155

<210> 1562

<211> 72

<212> PRT

<213> Homo sapiens

<220>

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<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1562

Xaa Asn Gln Asn Ser Asn Gly Leu Val Phe Leu Leu Trp Gly Ser Tyr
1 5 10 15

Ala Gln Lys Lys Gly Ser Ala Ile Asp Arg Lys Arg His His Val Leu 20 25 30

Gln Thr Ala His Pro Ser Pro Leu Ser Val Tyr Arg Gly Phe Phe Gly
35 40 45

Cys Arg His Phe Ser Lys Thr Asn Glu Leu Gln Lys Ser Gly Lys
50 55 60

Lys Pro Ile Asp Trp Lys Glu Leu

65

1632

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<210> 1563
<211> 110
<212> PRT
<213> Homo sapiens
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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1563
Arg Thr Arg Gly Arg Leu Leu Gly His Leu Lys Glu Thr Trp Gly His
                  5
                                     10
Pro Arg Arg Ala Ser Trp Val Val Arg Ser Arg Arg Cys Arg His Cys
             20
Leu Cys Phe Met Arg Lys Met Leu Ala Ala Val Ser Arg Val Leu Ser
Gly Ala Ser Gln Lys Pro Ala Ser Arg Val Leu Val Ala Ser Arg Asn
                         55
Phe Ala Asn Asp Ala Thr Phe Glu Ile Xaa Lys Cys Asp Leu His Arg
65
                     70
                                         75
Leu Glu Glu Ala Leu Leu Ser Gln Gln Cys Ser Pro Arg Glu Asp Gly
                 85
Leu Lys Tyr Tyr Arg Met Met Xaa Thr Val Pro Glu Trp Asn
            100
                                105
<210> 1564
<211> 95
<212> PRT
<213> Homo sapiens
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<223> Xaa equals any of the naturally occurring L-amino acids
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<220>

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<222> (47)
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<222> (61)
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<222> (70)
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<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1564
Leu His Ser Xaa Cys Thr Arg Arg Gly Ser Gly Ser Leu Arg Leu Cys
 1
                  5
                                     10
Ser Val Ala Arg Val Gly Gln Arg Arg Met Thr Ser Ala Ala Met Ser
             20
Lys Pro His Ser Glu Xaa Gly Thr Ala Phe Ile Gln Thr Gln Xaa Leu
                             40
His Ala Xaa Met Ala Asp Thr Phe Leu Glu His Met Xaa Arg Leu Asp
    50
                         55
                                              60
```

1634

Ile Asp Ser Pro Pro Xaa Thr Gly Arg Asn Thr Gly Ile Ile Cys Thr 65 70 75 80

Ile Gly Pro Ala Ser Arg Ser Xaa Gly Asp Gly Xaa Gly Xaa Asp 85 90 95

<210> 1565

<211> 50

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (37)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (49)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1565

Pro Thr Met Ala Ala Ile Arg Lys Lys Leu Val Ile Val Gly Asp Gly 1 5 10 15

Ala Cys Gly Lys Thr Cys Leu Leu Ile Val Phe Ser Xaa Asp Gln Phe 20 25 30

Pro Glu Val Tyr Xaa Pro Thr Val Leu Xaa Glu Leu Tyr Cys Ala His 35 40 45

Xaa Gly

50

<210> 1566

<211> 161

1635

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (155)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1566

Ala Ala Met Phe Asn Ile Arg Asn Ile Gly Lys Thr Leu Val Thr Arg

1 5 10 15

Thr Gln Gly Thr Lys Ile Ala Ser Asp Gly Leu Lys Gly Arg Val Phe 20 25 30

Glu Val Ser Leu Ala Asp Leu Gln Asn Asp Glu Val Ala Phe Arg Lys 35 40 45

Phe Lys Leu Ile Thr Glu Asp Val Gln Gly Lys Asn Cys Leu Thr Asn 50 55 60

Phe His Gly Met Asp Leu Thr Arg Asp Lys Met Cys Ser Met Val Lys 65 70 75 80

Lys Trp Gln Thr Met Ile Glu Ala His Val Asp Val Lys Thr Thr Asp 85 90 95

Gly Tyr Leu Leu Arg Leu Phe Cys Val Gly Phe Thr Lys Lys Arg Asn 100 105 110

Asn Gln Ile Arg Lys Thr Ser Tyr Ala Gln His Gln Gln Val Arg Gln 115 120 125

Ile Arg Lys Lys Met Met Glu Ile Met Thr Arg Glu Val Gln Thr Asn 130 135 140

Thr

<210> 1567

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1567

Pro Ser Leu Lys Gly Thr Lys Ala Gly Ala Pro Pro Arg Cys Gly Arg

1636

15 · 1 10 Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Ser Pro 20 Gly Pro Arg Gln Ser Pro Ala Arg Leu Val Ala Met Pro Arg Lys Ile 40 Glu Glu Ile Lys Asp Phe Leu Leu Thr Ala Arg Arg Lys Asp Ala Lys Ser Val Lys Ile Lys Lys Asn Lys Asp Asn Val Lys Phe Lys Val Arg Cys Ser Arg Tyr Leu Tyr Thr Leu Val Ile Thr Asp Lys Glu Lys Ala 90 Glu Lys Leu Lys Gln Ser Leu Pro Pro Gly Leu Ala Val Lys Glu Leu 100 105 Lys <210> 1568 <211> 48 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (8) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (24) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (33) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1568 Gly Cys Asn Tyr Gly Lys Pro Xaa His His Gly Val Asn Gln Leu Lys 10 Phe Ala Arg Ser Leu Gln Ser Xaa Ala Glu Glu Arg Ala Gly Arg His

25

20

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1637

Xaa Gly Ala Leu Arg Val Leu Asn Ser Tyr Trp Val Gly Glu Asp Ser 35 40 45

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<210> 1569
<211> 120
<212> PRT
<213> Homo sapiens
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<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (106)
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<400> 1569
Gly Thr Ser Glu Arg Xaa Glu His Ala Met Lys Ala Ser Gly Thr Leu
Arg Glu Tyr Lys Val Val Gly Arg Cys Leu Pro Thr Pro Lys Cys His
             20
                                 25
                                                      30
Thr Pro Pro Leu Tyr Arg Met Arg Ile Phe Ala Pro Asn His Val Val
         35
                             40
Ala Lys Ser Arg Phe Trp Tyr Phe Val Ser Gln Leu Lys Lys Met Lys
Lys Ser Ser Gly Glu Ile Val Tyr Cys Gly Gln Val Phe Glu Lys Ser
65
                     70
                                         75
Pro Leu Arg Val Lys Asn Phe Gly Ile Trp Leu Arg Tyr Asp Ser Arg
```

90

110

Ser Gly Thr His Asn Met Xaa Arg Glu Xaa Arg Asp Leu Thr Asn Ala

105

85

1638

Gly Ala Val Asn Gln Cys Asn Gly 115 120

<210> 1570

<211> 85

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (61)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (78)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1570

Cys Pro Pro Leu Trp Gln Glu Glu Val Trp Leu Asp Pro Asn Glu Thr 1 5 10 15

Asn Glu Ile Ala Asn Ala Asn Ser Arg Gln Gln Ile Arg Lys Leu Ile 20 25 30

Lys Asp Gly Leu Ile Ile Arg Lys Pro Val Thr Val His Ser Arg Ala 35 40 45

Arg Cys Arg Lys Asn Thr Leu Ala Arg Arg Lys Gly Xaa His Met Gly 50 55 60

Ile Val Ser Gly Lys Val Gln Pro Met Pro Glu Cys Gln Xaa Arg Ser 65 70 75 80

His Gly Leu Arg Lys 85

<210> 1571

<211> 135

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (134)

<223> Xaa equals any of the naturally occurring L-amino acids

1639

<400> 1571 Phe Ala Lys Met Thr Asn Thr Lys Gly Lys Arg Arg Gly Thr Arg Tyr 10 Met Phe Ser Arg Pro Phe Arg Lys His Gly Val Val Pro Leu Ala Thr 20 25 Tyr Met Arg Ile Tyr Lys Lys Gly Asp Ile Val Asp Ile Lys Gly Met 40 Gly Thr Val Gln Lys Gly Met Pro His Lys Cys Tyr His Gly Lys Thr Gly Arg Val Tyr Asn Val Thr Gln His Ala Val Gly Ile Val Val Asn 65 Lys Gln Val Lys Gly Lys Ile Leu Ala Lys Arg Ile Asn Val Arg Ile Glu His Ile Lys His Ser Lys Ser Arg Asp Ser Phe Leu Lys Arg Val 105 100 Lys Glu Asn Asp Gln Lys Lys Glu Ala Lys Glu Lys Gly Thr Trp 125 115 120 Val Gln Leu Lys Arg Xaa Pro 130 135 <210> 1572 <211> 71 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (7) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (8) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (13) <223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids
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<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids
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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1572
Thr Ala Thr Pro Ala Asn Xaa Xaa Leu Pro Trp Gly Xaa Lys Lys Xaa
 1
                                      10
Ala Arg Arg Ser Lys Ile Xaa Ser Phe Val Xaa Val Cys Xaa Tyr Asn
             20
                                  25
```

1641

His Leu Met Pro Xaa Arg Tyr Ser Val Xaa Tyr Ser Pro Trp Gly Lys
35 40 45

Ala Val Arg Ser Leu Gly Cys Leu Pro Xaa Phe Leu Ala Leu Lys Arg 50 55 60

Xaa Ala Arg Arg Xaa Pro Arg 65 70

<210> 1573

<211> 68

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (59)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (62)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (67)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1573

Ala Ala Ala Lys Gly Ala Ala Ala Met Ser Ala His Leu Gln Trp Met

1 5 10 15

Val Val Arg Asn Cys Ser Ser Phe Leu Ile Lys Arg Asn Lys Gln Thr
20 25 30

Tyr Ser Thr Glu Pro Asn Asn Leu Lys Ala Arg Asn Ser Phe Arg Tyr 35 40 45

Asn Gly Leu Ile His Arg Lys Thr Val Gly Xaa Glu Pro Xaa Ala Asp 50 55 60

Gly Lys Xaa Val 65

<210> 1574

<211> 127

1642

<212> PRT <213> Homo sapiens <220> <221> SITE <222> (4) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1574 Gly Arg Met Xaa Pro Ala Lys Lys Gly Glu Lys Lys Lys Gly Arg 10 Ser Ala Ile Asn Glu Val Val Thr Arg Glu Tyr Thr Ile Asn Ile His 25 Lys Arg Ile His Gly Val Gly Phe Lys Lys Arg Ala Pro Arg Ala Leu 35 40 Lys Glu Ile Arg Lys Phe Ala Met Lys Glu Met Gly Thr Pro Asp Val Arg Ile Asp Thr Arg Leu Asn Lys Ala Val Trp Ala Lys Gly Ile Arg Asn Val Pro Tyr Arg Ile Arg Val Arg Leu Ser Arg Lys Arg Asn Glu 85 90 Asp Glu Asp Ser Pro Asn Lys Leu Tyr Thr Leu Val Thr Tyr Val Pro 100 105 Val Thr Thr Phe Lys Asn Leu Gln Thr Val Asn Val Asp Glu Asn 120 <210> 1575 <211> 115 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (12) <223> Xaa equals any of the naturally occurring L-amino acids

<220>

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1643

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<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (40)
<223> Kaa equals any of the naturally occurring L-amino acids
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<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (65)
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<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1575
Trp Phe Pro Arg Ala Ala Gly Phe Arg His Xaa Xaa Val Gln Ile Arg
 1
                  5
Ala Xaa Glu Arg Lys Gly Thr Ser Ser Phe Gly Lys Xaa Arg Asn Lys
             20
Thr His Thr Leu Cys Arg Arg Xaa Gly Ser Lys Ala Tyr His Leu Gln
                             40
Xaa Ser Thr Cys Gly Lys Phe Gly Tyr Pro Ala Lys Arg Lys Arg Lys
     50
                                              60
Xaa Asn Trp Ser Ala Lys Ala Lys Arg Arg Asn Thr Thr Gly Thr Gly
65
                     70
```

Arg Xaa Arg His Leu Lys Phe Val Tyr Arg Arg Phe Arg His Gly Phe

1644

85 90 95

Xaa Glu Gly Thr Thr Pro Lys Pro Lys Arg Ala Ala Val Ala Ala Ser 100 105 110

Ser Ser Ser 115

<210> 1576

<211> 121

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (108)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (114)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (116)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1576

Gly Arg Arg Ser Glu Met Thr Lys Gly Thr Ser Ser Phe Gly Lys Arg
1 5 10 15

Arg Asn Lys Thr His Thr Leu Cys Arg Arg Cys Gly Ser Lys Ala Tyr
20 25 30

His Leu Gln Lys Ser Thr Cys Gly Lys Cys Gly Tyr Pro Ala Lys Arg 35 40 45

Lys Arg Lys Tyr Asn Trp Ser Ala Lys Ala Lys Arg Arg Asn Thr Thr 50 55 60

Gly Thr Gly Arg Met Arg His Leu Lys Ile Val Tyr Arg Arg Phe Arg 65 70 75 80

His Gly Phe Arg Glu Gly Thr Thr Pro Lys Pro Lys Arg Ala Ala Val 85 90 95

Ala Ala Phe Gln Phe Ile Phe Lys Asn Val Asn Xaa Phe Ser His Ala
100 105 110

1645

```
Ile Xaa Cys Xaa Gly Val Leu Lys Asn
115 120
```

```
<210> 1577
<211> 61
<212> PRT
<213> Homo sapiens
<220>
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<222> (57)
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<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids
Gly Ile Val Gly Lys Tyr Gly Thr Arg Tyr Gly Ala Ser Leu Arg Lys
Met Val Lys Lys Ile Glu Ile Ser Gln His Ala Lys Tyr Thr Cys Ser
Phe Cys Gly Lys Thr Lys Met Lys Arg Arg Ala Val Gly Ile Trp His
         35
                             40
Cys Gly Ser Cys Met Lys Thr Val Xaa Gly Xaa Ala Xaa
     50
                         55
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<210> 1578
<211> 74
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<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

1646

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<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (51)
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<220>
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<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1578
Glu Leu Gly Lys Gly Lys Met Glu Lys Pro Ser Pro Tyr Pro Ala Gln
                                    10
Gly Pro Cys Ile Ile Tyr Asn Glu Asp Asn Gly Ile Ile Lys Ala Phe
             20
Gln Lys His Pro Trp Asn Tyr Ser Ala Xaa Met Xaa Ser Lys Leu Lys
His Phe Xaa Ser Leu Leu Pro Gly Gly Ala Cys Gly Asp Val Xaa Gly
Ile Gly Xaa Glu Met Ala Phe Pro Gly Xaa
65
                    70
<210> 1579
<211> 98
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
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<222> (2)

1647

<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (81) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (87) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (91) <223> Xaa equals any of the naturally occurring L-amino acids Ser Xaa Met Ala Cys Ala Arg Pro Leu Ile Ser Val Tyr Ser Glu Lys Gly Glu Ser Ser Gly Lys Asn Val Thr Leu Pro Ala Val Phe Lys Ala 25 Pro Ile Arg Pro Asp Ile Val Asn Phe Val His Thr Asn Leu Arg Lys 35 40 Asn Asn Arg Gln Pro Tyr Ala Val Ser Glu Leu Ala Gly His Gln Thr Ser Ala Glu Ser Trp Gly Thr Gly Arg Ala Val Ala Arg Ile Pro Arg Xaa Arg Gly Gly Thr Xaa Arg Ser Gly Xaa Gly Ala Phe Gly Asn 90 Met Cys <210> 1580 <211> 72 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (4) <223> Xaa equals any of the naturally occurring L-amino acids

1648

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<222> (50)
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<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1580
Leu Ser Leu Xaa Gly Lys Lys Lys Lys Arg Leu Arg Val Asp Lys Trp
                 5
                                     10
Trp Gly Xaa Arg Lys Glu Leu Ala Thr Val Arg Thr Ile Cys Ser His
             20
Val Gln Asn Met Ile Lys Gly Val Thr Leu Gly Phe Arg Tyr Lys Met
                             40
Arg Xaa Val Tyr Ala His Xaa Pro Ile Asn Val Val Ile Gln Glu Xaa
    50
                         55
                                             60
Gly Ser Ile Val Glu Ile Xaa Xaa
65
                     70
<210> 1581
<211> 153
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<212> PRT

1649

<213> Homo sapiens

<400> 1581

Ala Ile Met Gly Arg Met His Ala Pro Gly Lys Gly Leu Ser Gln Ser
1 5 10 15

Ala Leu Pro Tyr Arg Arg Ser Val Pro Thr Trp Leu Lys Leu Thr Ser 20 25 30

Asp Asp Val Lys Glu Gln Ile Tyr Lys Leu Ala Lys Lys Gly Leu Thr 35 40 45

Pro Ser Gln Ile Gly Val Ile Leu Arg Asp Ser His Gly Val Ala Gln 50 55 60

Val Arg Phe Val Thr Gly Asn Lys Ile Leu Arg Ile Leu Lys Ser Lys 65 70 75 80

Gly Leu Ala Pro Asp Leu Pro Glu Asp Leu Tyr His Leu Ile Lys Lys 85 90 95

Ala Val Ala Val Arg Lys His Leu Glu Arg Asn Arg Lys Asp Lys Asp 100 105 110

Ala Lys Phe Arg Leu Ile Leu Ile Glu Ser Arg Ile His Arg Leu Ala
115 120 125

Arg Tyr Tyr Lys Thr Lys Arg Val Leu Pro Pro Asn Trp Lys Tyr Glu 130 135 140

Ser Ser Thr Ala Ser Ala Leu Val Ala 145 150

<210> 1582

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1582

Gly Pro Ala Asn Met Gly Arg Val Arg Thr Lys Thr Val Lys Lys Ala 1 5 10 15

Ala Arg Val Ile Ile Glu Lys Tyr Tyr Thr Arg Leu Gly Asn Asp Phe 20 25 30

His Thr Asn Lys Arg Val Cys Glu Glu Ile Ala Ile Ile Pro Ser Lys 35 40 45

Lys Leu Arg Asn Lys Ile Ala Gly Tyr Val Thr His Leu Met Lys Arg

1650

50 55 60

Ile Gln Arg Gly Pro Val Arg Gly Ile Ser Ile Lys Leu Gln Glu Glu 65 70 75 80

Glu Arg Glu Arg Asp Asn Tyr Val Pro Glu Val Ser Ala Leu Asp
85 90 95

Gln Glu Ile Ile Glu Val Asp Pro Asp Thr Lys Glu Met Leu Lys Leu 100 105 110

Leu Asp Phe Gly Ser Leu Ser Asn Leu Gln Ser Leu Ser Leu Gln Leu 115 120 125

Gly

<210> 1583

<211> 109

<212> PRT

<213> Homo sapiens

<400> 1583

Asn Asn Gly Arg Ala Lys Lys Gly Arg Gly His Val Gln Pro Ile Arg 1 5 10 15

Cys Thr Asn Cys Ala Arg Cys Val Pro Lys Asp Lys Ala Ile Lys Lys 20 25 30

Phe Val Ile Arg Asn Ile Val Glu Ala Ala Val Arg Asp Ile Ser 35 40 45

Glu Ala Ser Val Phe Asp Ala Tyr Val Leu Pro Lys Leu Tyr Val Lys
50 60

Leu His Tyr Cys Val Thr Val Pro Ser Ile Ala Arg Leu Leu Gly Ile 65 70 75 80

Asp Pro Ala Lys Pro Gly Arg Thr Glu His Pro His His Asp Ser Asp 85 90 95

Leu Leu Ala Leu His Leu Arg Pro Pro Pro Lys Pro Met
100 105

<210> 1584

<211> 119

<212> PRT

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<213> Homo sapiens
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<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1584
Val Gln Arg Phe Ile Lys Ile Asp Gly Lys Val Arg Thr Asp Ile Thr
Tyr Pro Ala Gly Phe Met Asp Val Ile Ser Ile Asp Lys Thr Gly Glu
                                 25
Asn Phe Arg Leu Ile Tyr Asp Thr Lys Gly Arg Phe Ala Val His Arg
         35
                             40
Ile Thr Pro Glu Glu Ala Lys Tyr Lys Leu Cys Xaa Val Arg Lys Ile
Phe Val Gly Thr Lys Gly Ile Pro His Leu Val Thr His Asp Ala Arg
                                         75
Thr Ile Arg Tyr Pro Asp Pro Leu Ile Lys Val Asn Asp Pro Phe Ile
                 85
                                     90
Leu Ile Xaa Arg Leu Ala Arg Leu Leu Ile Ser Ser Ile Ser Thr Leu
                                105
            100
Val Thr Cys Val Trp Xaa Leu
       115
<210> 1585
<211> 81
<212> PRT
<213> Homo sapiens
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<221> SITE
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1652

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<400> 1585
Gly Arg Tyr Ala Ala Lys Arg Phe Arg Lys Ala Gln Cys Xaa Ile Val
                                     10
Glu Arg Leu Thr Asn Ser Met Met Met Xaa Gly Arg Asn Asn Gly Lys
                                 25
Lys Leu Met Thr Val Arg Ile Val Xaa His Ala Phe Glu Ile Ile Arg
         35
                             40
                                                  45
Leu Leu Thr Gly Xaa Glu Pro Ser Ala Gly Pro Gly Glu Arg His His
     50
                         55
Gln His Xaa Ser Pro Gly Arg Xaa His Xaa His Trp Ala Arg Arg Asp
                     70
                                        75
```

Cys

1653

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<211> 111
<212> PRT
<213> Homo sapiens
<400> 1586
Lys Asn Cys Ile Val Leu Ile Asp Ser Thr Pro Tyr Arg Gln Trp Tyr
                 5
                                     10
Glu Ser His Tyr Ala Leu Pro Leu Gly Arg Lys Lys Gly Ala Lys Leu
Thr Pro Glu Glu Glu Ile Leu Asn Lys Lys Arg Ser Lys Lys Ile
                                                 45
Gln Lys Lys Tyr Asp Glu Arg Lys Lys Asn Ala Lys Ile Ser Ser Leu
                         55
Leu Glu Glu Gln Phe Gln Gly Lys Leu Leu Ala Cys Ile Ala Ser
                                         75
Arg Pro Gly Gln Cys Gly Arg Ala Asp Gly Tyr Val Leu Glu Gly Lys
                                     90
Glu Leu Glu Phe Tyr Leu Arg Lys Ile Lys Ala Arg Lys Gly Lys
            100
                               105
<210> 1587
<211> 125
<212> PRT
<213> Homo sapiens
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1587
Arg Thr Met Pro Gly Val Thr Val Lys Asp Val Asn Gln Glu Phe
                                    10
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<210> 1586

1654

Val Arg Ala Leu Ala Ala Phe Leu Lys Lys Ser Gly Lys Leu Lys Val 20 Pro Glu Trp Val Asp Thr Val Lys Leu Ala Lys His Lys Glu Leu Ala Pro Tyr Asp Glu Asn Trp Phe Tyr Thr Arg Ala Ala Ser Thr Ala Arg 55 His Leu Tyr Leu Arg Gly Gly Ala Gly Val Gly Ser Met Thr Lys Ile 65 Tyr Gly Gly Arg Gln Arg Asn Gly Val Met Pro Ser His Phe Ser Arg 90 Gly Ser Lys Ser Val Ala Arg Arg Xaa Leu Gln Ala Leu Gly Gly Ala 105 Glu Asn Gly Gly Xaa Gly Pro Arg Trp Arg Pro Ala Asn 115 120 <210> 1588 <211> 38 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (4) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (8) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (19) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (29) <223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1588
Cys Met Leu Xaa Leu Val Leu Xaa Leu Leu Ser Ser Ser Ala Glu
Glu Tyr Xaa Gly Leu Ser Ala Asn Gln Cys Ala Val Xaa Ala Lys Asp
             20
                                 25
Xaa Val Xaa Cys Gly Tyr
         35
<210> 1589
<211> 55
<212> PRT
<213> Homo sapiens
<400> 1589
Gly Thr Ala Thr Gln Gly Leu Ser Pro Val His Thr Pro Gly Asp Gly
Arg Leu His Lys Ala Val Ser Val Gly Pro Arg Val His Ile Ile Glu
                                25
Glu Leu Gln Ile Phe Ser Ser Gly Gln Pro Val Ala Glu Ser Ala Pro
                                                 45
         35
                             40
Gly Thr Pro Thr Gly Gly Leu
     50
<210> 1590
<211> 92
<212> PRT
<213> Homo sapiens
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<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1590
Leu Glu Asp Gly Phe Gly Glu His Pro Phe Tyr His Cys Leu Xaa Ala
```

1656

1 10 15 Glu Val Pro Lys Glu His Trp Thr Pro Glu Gly His Ser Ile Val Gly 20 25 Phe Ala Met Tyr Tyr Phe Thr Tyr Asp Pro Trp Ile Gly Lys Leu Leu 40 Tyr Leu Glu Asp Phe Phe Val Met Ser Asp Tyr Arg Gly Phe Gly Ile 55 Gly Ser Glu Ile Leu Lys Asn Leu Ser Gln Val Ala Met Arg Cys Arg 65 75 Cys Ser Ser Met His Phe Phe Gly Ser Arg Met Glu 85 <210> 1591 <211> 139 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (1) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (5) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (8) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (56) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

1657

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<222> (133)
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<400> 1591
Xaa Gly Gly Phe Xaa Ile Thr Xaa Gly Xaa Asp Glu Gly Lys Leu Val
                                    10
Thr Pro Ala Gly Asp Arg Ser Gly Ile Pro Gly Ser Thr His Ala Ser
             20
Gly Arg Asp Val Ser Gln Lys Val Leu Arg Ser Gln Thr Trp Val Pro
                             40
Arg Leu Pro Ala Ser Glu Ala Xaa Ser Arg His Arg Gly Lys Val Lys
                         55
Ser Phe Pro Lys Asp Asp Pro Ser Lys Pro Val His Leu Thr Ala Phe
65
                    70
                                        75
Leu Gly Tyr Lys Ala Gly Met Thr His Ile Val Arg Glu Val Asp Arg
Pro Gly Ser Lys Val Asn Lys Lys Glu Gly Gly Gly Cys Asp His
                               105
Cys Xaa Asp Thr Xaa His Gly Gly Leu Trp Ala Leu Xaa Ala Thr Leu
        115
                            120
                                               125
Glu Asn Pro Arg Xaa Leu Arg Asn Phe Lys Asn
    130
                        135
```

<210> 1592

<211> 42

<212> PRT

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<213> Homo sapiens
<400> 1592
Ala Glu His Gly Asp Gln Asp Tyr Ile Trp His Cys Ile Asp Leu Phe
Leu Asp Phe Ile Thr Val Phe Arg Lys Leu Met Met Ile Leu Ala Met
             20
                                 25
Asn Glu Lys Asp Lys Lys Lys Glu Lys Lys
         35
<210> 1593
<211> 85
<212> PRT
<213> Homo sapiens
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<222> (17)
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<222> (33)
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<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
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<220>
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<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1593
Trp Ile Pro Arg Ala Ala Gly Ser Leu Ser Leu Ala Gln Arg Arg Gly
                                      10
Xaa Thr Lys Thr Tyr Thr Val Gly Xaa Glu Glu Cys Thr Val Xaa Pro
Xaa Leu Ser Ile Pro Cys Lys Leu Gln Ser Gly Thr His Cys Xaa Trp
         35
Thr Asp Gln Leu Leu Gln Gly Xaa Glu Lys Gly Xaa Gln Xaa Arg His
                         55
Leu Ala Cys Leu Pro Arg Glu Pro Gly Leu Gly Thr Trp Gln Xaa Leu
                                         75
                     70
Arg Ser Gln Ile Ala
<210> 1594
<211> 183
<212> PRT
<213> Homo sapiens
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<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (160)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1594
Ala Ala Arg Gly Ala Gln Arg Asp Thr Arg Glu Pro Thr Met Ala Pro
                  5
                                     10
                                                          15
Phe Glu Pro Leu Ala Ser Gly Ile Leu Leu Leu Trp Leu Ile Ala
             20
                                 25
Pro Ser Arg Ala Cys Thr Cys Val Pro Pro His Pro Gln Thr Ala Phe
Cys Asn Ser Asp Leu Val Ile Arg Ala Lys Phe Val Gly Thr Pro Glu
                         55
Val Asn Gln Thr Thr Leu Tyr Gln Arg Tyr Glu Ile Lys Met Thr Xaa
65
                     70
                                         75
Met Tyr Lys Gly Phe Gln Ala Leu Gly Asp Ala Ala Asp Ile Arg Phe
                 85
                                     90
Val Tyr Thr Pro Ala Met Glu Ser Val Cys Xaa Tyr Phe His Arg Ser
            100
His Asn Arg Ser Glu Glu Phe Leu Ile Xaa Gly Lys Leu Gln Asp Gly
        115
                            120
                                                 125
Leu Leu His Ile Thr Thr Cys Xaa Phe Val Ala Pro Trp Asn Ser Leu
                        135
                                            140
```

1661

Ser Leu Ala Gln Arg Arg Xaa Xaa Thr Lys Thr Tyr Thr Val Gly Xaa 145 155 150 Glu Glu Met His Lys Cys Phe Pro Val Tyr Pro Ser Pro Ala Asn Cys 170 Arg Val Gly Thr His Cys Leu 180 <210> 1595 <211> 153 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (143) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (151) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1595 Ser Thr Cys Pro Asp Glu Gln Cys Val Asn Ser Pro Gly Ser Tyr Gln Cys Val Pro Cys Thr Glu Gly Phe Arg Gly Trp Asn Gly Gln Cys Leu Asp Val Asp Glu Cys Leu Glu Pro Asn Val Cys Ala Asn Gly Asp Cys 35 40 Ser Asn Leu Glu Gly Ser Tyr Met Cys Ser Cys His Lys Gly Tyr Thr 50 55 Arg Thr Pro Asp His Lys His Cys Arg Asp Ile Asp Glu Cys Gln Gln Gly Asn Leu Cys Val Asn Gly Gln Cys Lys Asn Thr Glu Gly Ser Phe

Phe Glu Asp Ile Asp Glu Cys His Thr Val Ile Ser Val Ala His Gly 115 120 125

Arg Cys Thr Val Asp Arg Gly Tyr Gln Leu Ser Ala Ala Lys Asp Gln

90

1662

```
His Ala Arg Thr Leu Lys Leu Phe Ser Met Cys Phe Leu Thr Xaa Val 130 135 140

Thr Glu His Leu Gly Leu Xaa Thr Leu 145 150

<210> 1596
<211> 111
<212> PRT
<213> Homo sapiens

<220>
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<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1596
Leu Gly Ser Ser Ala Met Ala Pro Ser Arg Lys Phe Phe Val Gly Gly
```

Asn Trp Lys Met Asn Gly Arg Lys Gln Ser Leu Gly Glu Leu Ile Gly

10

Thr Leu Asn Ala Ala Lys Val Pro Ala Asp Thr Glu Val Val Cys Ala
35 40 45

Pro Pro Thr Ala Tyr Ile Asp Phe Ala Arg Gln Lys Leu Asp Pro Lys 50 55 60

Ile Ala Val Ala Ala Gln Asn Cys Tyr Lys Val Thr Asn Gly Ala Phe 65 70 75 80

Thr Gly Glu Ile Ser Pro Gly Met Ile Lys Asp Cys Gly Pro Arg Gly 85 90 95

Trp Ser Trp Gly Thr Xaa Arg Glu Ala Cys Leu Trp Gly Ile Arg
100 105 110

<210> 1597 <211> 82 <212> PRT <213> Homo sapiens <220>

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<220>

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<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (80)
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<400> 1597
Ile Phe Glu Asp Ser Asp Ser Leu Arg Leu Arg Asp Val Leu Pro
Ala Ala Xaa Val Gln Ala Ala Leu Pro Ala Thr Ser Cys Val Pro His
             20
                                 25
Ala Lys Val Pro Lys Ser His Val His Pro Arg Ser Ala Leu Ser Leu
                             40
Thr Cys Leu Leu Val His Leu Ser Ile Ala His Leu His Leu Ala
                         55
Ser Ile Asn Ala Leu Leu Xaa Gln Pro Tyr His Pro Gly Ser Xaa Xaa
Ser Pro
<210> 1598
<211> 52
<212> PRT
<213> Homo sapiens
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<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1598
Xaa Lys Xaa Gly Arg Asn Lys Ala Arg Pro Leu Thr Ser Leu Arg Xaa
                                     10
Thr Phe Xaa Ala Thr Phe Cys Pro Val Xaa Gly Thr Tyr Ile Leu Asn
             20
Asp Cys Pro Xaa Thr His Ser Gly Ile Phe Phe Phe Leu Lys Xaa Xaa
         35
                             40
Xaa Lys Ala Phe
     50
```

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<210> 1599
<211> 32
<212> PRT
<213> Homo sapiens
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<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (27)
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Ala Phe Asn Xaa Ser Tyr Arg Lys Xaa Val Xaa Ala Val Arg Xaa Glu
                  5
                                      10
Phe Arg Val Thr Gln Arg Pro Gly Leu Xaa Xaa Leu Gly Leu Glu Phe
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<210> 1600
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<211> 19

<212> PRT

<213> Homo sapiens

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<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1600
Ala Arg Gly Phe Phe Phe Phe Phe Phe Phe Kaa Xaa Phe Xaa Phe
Phe Lys Lys
<210> 1601
<211> 22
<212> PRT
<213> Homo sapiens
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<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1601
10
Phe Phe Phe Xaa Pro Xaa
            20
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1667

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<211> 104
<212> PRT
<213> Homo sapiens
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<400> 1602
Asp Phe Gly Arg Ser Phe Leu Leu Trp Phe Ser Leu Phe Phe Leu Pro
                                     10
Phe Tyr Ser Ala Arg Ile Ser Gly Gly Leu Met Val Gly Tyr Asn Val
                                 25
Ser Val Leu Leu Gln Ile Gly Leu Lys Gly Tyr Pro Ala Glu Ser Pro
                             40
Ala Phe Leu Ser Ser Ile Tyr Phe Ser Gly Lys Leu Phe Phe Leu Phe
Phe Phe Lys Val Asn Leu Cys Ile Glu Leu Asn Cys Ile Ser Val Phe
                    70
                                         75
Pro Ala Tyr Val Tyr Ile Ile Pro Met Ile Pro Asn Ser Tyr Leu Tyr
                                     90
                 85
Phe Xaa Thr Asn Ser Gln Ser Glu
           100
<210> 1603
<211> 86
<212> PRT
<213> Homo sapiens
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<222> (30)
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<220>
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<222> (45)
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<223> Xaa equals any of the naturally occurring L-amino acids

1668

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<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (81)
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Phe Leu Met Leu Ser Phe Met Gly Ile Val Thr Phe Leu Phe Ser Lys
Ser His Cys Trp Asn His Gln Gly Cys Gly Met Ser Leu Xaa Val Leu
Phe Met Gln Val Thr Val Thr Phe Ala Ile Met Ala Xaa Phe Glu Thr
         35
                             40
Leu Ile Met Cys Phe Tyr Phe Phe Ile Pro Val Lys Met Xaa Xaa Lys
     50
                         55
Arg Lys Lys Val Val Ile Ala Pro Xaa Ile Ser Gly Ser Lys Leu Xaa
Xaa Lys Phe Pro Lys Lys
                 85
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<210> 1604

<211> 34

<212> PRT

<213> Homo sapiens

1669

<400> 1604

```
Ser Asp Glu Ile Ile Tyr Asn Phe Ile Val Thr Ser Ser Val Phe Pro
                  5
                                     10
Phe Glu Arg Cys Met Asn Ser Leu His Phe Tyr Ser Asn Val Leu Ser
                                  25
Val Asp
<210> 1605
<211> 53
<212> PRT
<213> Homo sapiens
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<222> (43)
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<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1605
Leu Leu Val Trp Ser Glu Tyr Asn Thr Ser Ile Ile Thr Tyr Asn Ser
                  5
                                     10
                                                         15
```

```
Xaa Pro Gly Thr Gly Gly Tyr Lys Tyr Asn Phe Phe Lys Xaa Asn Ser
Trp Leu Ser Thr Xaa Leu Gln Val Pro Leu Xaa Gly Xaa Leu Trp Xaa
         35
                             40
Ile Thr Leu Gly Lys
     50
<210> 1606
<211> 32
<212> PRT
<213> Homo sapiens
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1671

<400> 1606

Asp Ala Trp Ala Asp Ala Trp Gly Lys Val Ser Ser Ser Leu Xaa Ser Xaa Ile Cys Xaa Leu Xaa Xaa Arg Lys Val Arg Xaa Gly Gln Xaa Met 20 25 <210> 1607 <211> 31 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (28) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (30) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1607 Leu Ile Met Asp Thr Ile Leu Asn Lys Xaa Ile Gln Val Lys Pro Val Lys Glu Lys Glu Ile Lys Val Ser Gly Ser Cys Xaa Ser Xaa Val <210> 1608 <211> 107 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (24) <223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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1673

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                                    10
Gln Cys Glu Leu Gly Ala Gly Xaa Leu Pro Lys Gly Val Glu Lys Asp
             20
Ile Xaa Phe Arg Pro Xaa Leu Cys Leu Lys Gln Gln Leu Gly Thr
                             40
Val Glu Pro Ile Asn Leu Xaa Phe Asn Pro Leu Gly Ser Phe Phe Ala
Gly Gly Gly Gly Arg Lys Pro Trp Xaa Phe Xaa Xaa Phe Xaa Ser
65
                     70
                                         75
Gln Leu Asn Pro Gly Gln Xaa Asn Phe Leu Gly Pro Leu Lys Glu Lys
                 85
                                     90
Xaa Phe Gly Pro Xaa Xaa Xaa Xaa Leu Ser Xaa
           100
                                105
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<210> 1609 <211> 72 <212> PRT <213> Homo sapiens <220> <221> SITE

1674

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<400> 1609

Arg Gln Thr Ser Thr Ala Lys Leu Gln Lys Gly Gly Phe Cys Ser Arg 1 5 10 15

Arg Lys Glu Asp Val Tyr Leu Gln Gly Ala Lys Gln Gly Glu Leu Gly 20 25 30

Ser Ser Cys Leu Arg Pro Asn Leu His Asp Asp Leu Gln Ala Arg Val 35 40 45

Phe Lys Xaa Ser Gly Lys Phe Pro Gly Lys Pro Glu Val Lys Gly Gln 50 55 60

Asn Cys Lys Ser Val Glu Ile Gly 65 70

<210> 1610

<211> 77

<212> PRT

<213> Homo sapiens

<400> 1610

Leu Tyr Arg Gly Ser Val Gln Gly Arg Val Glu Leu Leu Ser Glu Gly
1 5 10 15

Ser Leu Gly Gly Pro Leu Arg Pro Gly Pro Asp Pro Val Leu Gln Gly 20 25 30

Leu Ser Gln Gly Gln Val His Gly Glu Thr Met Gly Cys Leu Ser Asp 35 40 45

Thr Asp Leu Ala Leu Leu Ser Pro Pro Ile Arg Leu Ser Phe Leu Cys
50 55 60

Ser Glu Cys Leu Gln Gly Leu Asp Pro Gly Lys Glu Phe 65 70 75

<210> 1611

<211> 72

<212> PRT

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1675

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<400> 1611
Glu Asn Leu Pro Ser Gln Xaa Ala Pro Ala Gly Leu Pro Lys Xaa Xaa
                  5
                                     10
                                                          15
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```
Gln Pro Cys Leu Tyr Phe Tyr Gly Xaa Asn Gly His Lys Ile Ile Ile
             20
Asn Leu Thr Lys Thr Xaa Leu Phe Ser Xaa Phe Leu Glu Leu Ser Trp
                             40
Ser Phe Leu Ile Leu Xaa Phe Gly Asn Xaa Arg Leu Phe Leu Lys Cys
                          55
Phe Xaa Asp Val Lys Ile Xaa Tyr
                     70
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                                     10
Met Leu Arg Gly Arg Asn Tyr Lys Xaa Cys Ser Asn Leu Phe Trp Val
             20
                                 25
Ile Xaa Met Tyr Leu Trp Val Gln Ala Leu Phe Gly Gly Phe Xaa Phe
Gln Arg Asn Xaa Xaa Lys Val Xaa Leu Leu Ile Lys Lys Arg Lys
                         55
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Lys Ser Xaa Ser Xaa Thr Ala Gly Asp Arg Xaa Xaa Thr Ser Gly Ser
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1678

10

15

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Pro Gly Leu Gln Glu Phe
             20
<210> 1614
<211> 85
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1679

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Phe Leu Leu Ala Gly Asp Ser Cys Thr Cys Ala Gly Ser Cys Lys Cys
                                  25
Lys Glu Cys Lys Cys Thr Ser Cys Lys Ser Lys Trp Asp Pro Leu
                             40
Phe Pro Leu Pro Leu Pro Val Leu Gln Pro Val Pro Ser Pro Ser
     50
                         55
                                             60
Ser Gly Glu Leu Lys Gln Val Trp Gly Cys Pro Ile Ala Pro Gly Asn
                                         75
Trp Trp Pro Pro Gln
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<211> 29
<212> PRT
<213> Homo sapiens
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Ala Glu Gly Asn Ile Arg Xaa Ala Lys Lys Lys Lys Lys Lys Lys Lys
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Lys Lys Lys Lys Lys Lys Lys Xaa Xaa Lys Xaa Xaa 20 25
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Gly Pro Ala Xaa Trp Arg Glu Thr Pro Pro Xaa Leu Tyr Lys Glu Phe
                                     10
Pro Gly Val Xaa Gly Ser Phe Ser Leu Xaa Ser Glu Trp Gly Ala Gln
                                 25
Ile Trp Ala Xaa Cys
        35
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<210> 1618

<211> 22

<212> PRT

<213> Homo sapiens

1682

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<400> 1618
Gly Xaa Gly Phe Xaa Pro Ser Pro Ser Cys Phe Pro Gln Cys Leu Lys
                  5
                                    10
Xaa Leu Asp Gly Leu Xaa
             20
<210> 1619
<211> 52
<212> PRT
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Gln Ser Ile Ser Leu Asn Arg Asp Gly Val Glu Glu Leu Lys Val Gly
                                     10
Ile Cys Ser Leu Met Thr Thr Met Phe Thr Ile Cys Cys Gly Leu Val
                                 25
Gly Ala Leu Arg Gln Glu Asn His Val Glu Pro Thr Gly Ser Arg Pro
                             40
Ala Trp Glu Thr
    50
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<210> 1620

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Pro Thr Glu Gln Val Thr Leu Gly Ile Thr Ala Gln Ser Tyr Ser Arg
                  5
Val His Ile Asn Asn Arg Val Tyr Asp Leu Asp Xaa Gly Ser Gly His
Pro Asp Xaa Ala Ala Ala Ile Lys Gly Ser Phe Val Gln Arg Leu Lys
Ser Tyr Val Ile
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<210> 1621
<211> 113
<212> PRT
<213> Homo sapiens
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Leu Phe Pro Ala Pro Ala Pro Pro Pro Ala Pro Ala Phe Ala Pro Pro
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1684

1 10 15 Pro Lys Val Pro Ser Pro Glu Arg Ser Ala Pro Arg Val Pro Leu Pro 20 25 Ser Pro Gln Pro Ser Tyr Pro Phe Arg Pro Ala Ala Ser Gly Gly Thr 40 Pro Pro Pro Ala Cys Leu Pro Pro Ala Gln Pro Cys Gln Val Pro Pro 55 Ala Met Asn Leu Phe Arg Phe Leu Gly Lys Leu Ser Gln Leu Leu Ala 70 Ile Ile Leu Leu Leu Kaa Ile Trp Asn Ser Arg Ser Cys Ala Glu 90 Ile Gln Glu Lys Asn Ser Pro Val Trp Cys Gly Xaa Phe Asn Gly Xaa 105 Ile <210> 1622 <211> 21 <212> PRT <213> Homo sapiens <220> <221> SITE <223> Xaa equals any of the naturally occurring L-amino acids Val Phe Lys Thr Met Xaa Gln Val Ser Asn Asp Glu Ile Lys His Leu 10 Phe Val Leu Tyr Gln 20

<210> 1623 <211> 40 <212> PRT <213> Homo sapiens <220> <221> SITE

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Leu Arg Thr Ser Cys Phe Xaa Leu Asn Xaa Met Ile His Phe Ile Lys
Val Pro Val Ile Lys Tyr Xaa Val Lys Tyr Leu Leu Xaa Trp Thr Ile
                                 25
Xaa Cys Lys Leu Pro Phe Xaa Xaa
         35
                             40
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Ile His Pro Xaa Leu Ala Ser Gln Val Ala Gly His Tyr Arg Arg Glu
                                      10
His Ser Arg Pro Arg Leu Lys Xaa Ala Tyr Ser Lys Lys Gln Phe Gln
             20
                                 25
```

1687

Phe Leu Ser Lys Leu Cys Xaa Xaa Arg Gly Ser Thr Asp Phe Leu Gly 35 40 45

Pro Val Asn Leu Asn Gln Ser Leu Arg Phe Cys Gln Glu Ser Ser Leu 50 55 60

Leu Ser Lys Trp Val Phe Pro Asn Gly His Asn Gly Lys Xaa Xaa Arg 65 70 75 80

Gly Xaa Asn Ile Lys Lys Xaa Lys Lys Asn Leu Gly Gly Xaa 85 90 95

<210> 1625

<211> 40

<212> PRT

<213> Homo sapiens

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<400> 1625

Ala Arg Ala Thr Met Ala Leu Trp Thr Xaa Val Ser Phe Ala Glu Xaa 1 5 10 15

Leu Glu Arg Gly Ser Asp Glu Lys Val Xaa Leu Lys Arg Leu Ala Arg
20 25 30

Leu Leu Gly Leu Ile Thr Ala Pro 35 40

<210> 1626

<211> 26

<212> PRT

<213> Homo sapiens

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Ala Arg Ala Gly Ile Val Pro Xaa His Ser Ser Leu Gly Asp Arg Ala
                                                          15
                                     10
Arg Leu His Leu Lys Lys Lys Lys Xaa
             20
<210> 1627
<211> 171
<212> PRT
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1689

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Pro Pro Arg Ala His His Arg Pro Val Ser Pro Ala Ala Pro Gly Arg
                                 25
Trp Ser Thr Ser Ala Arg Val Arg Thr Arg Lys Met Val Asn Tyr Ala
         35
                                                  45
                             40
Trp Ala Gly Arg Xaa Arg Arg Lys Leu Trp Trp Arg Ser Val Ala Val
     50
                         55
Leu Thr Cys Lys Ser Val Val Arg Pro Gly Tyr Arg Gly Glu Arg Leu
Asn Arg Thr Ile Leu Val Ser Trp Phe Pro Ser Glu Xaa Phe Pro Gln
                 85
                                     90
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1691

Asp Lys Leu Gly Ala Leu Ala Arg Pro Arg Arg Asn Pro Xaa Xaa Gly
100 105 110

Ile Phe Ile Arg Xaa Lys Arg Ile 115 120

<210> 1629

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1629

Asn Leu Val Pro Gly Ser Ser Ala Thr Tyr Ile Ser Leu Ser Ser Cys
1 5 10 15

Cys Phe Val Lys Arg Lys Lys Lys Pro Lys Leu Val Arg Val
20 25 30

Ile Ser Asn Tyr Leu Ile Phe Cys Arg Ser Val Ile Lys Asn Leu Val
35 40 45

Ile Pro Ser Thr Ser Tyr Cys Glu Glu Gln Thr Leu Gly Pro Thr Leu 50 55 60

Lys Ser Pro Leu Val Thr His Ser His Pro Pro Gly Ser Cys Leu Pro 65 70 75 80

Gly Arg Gly Cys Arg Lys

<210> 1630

<211> 35

<212> PRT

<213> Homo sapiens

<220>

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<400> 1630

Leu Lys Lys Lys Phe Pro Glu Glu Glu Lys Lys Thr Thr Lys Asn Lys 1 5 10 15

Thr Leu Lys Val Asp Ile Leu Cys Gly Xaa Thr Phe Glu Leu Asn Ser 20 25 30

1692

PCT/US00/05882

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Glu Phe Phe
        35
<210> 1631
<211> 40
<212> PRT
<213> Homo sapiens
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His Glu Gln Pro Thr Ala Ala Cys Ile Cys Ile Xaa Arg Gln Val Pro
Pro Val Pro Ala Ala Arg Xaa Pro Gln Ser Arg Thr Xaa Ser Xaa Gln
             20
                                 25
Ala Lys Leu Ala Leu Thr Met Pro
         35
                            40
<210> 1632
<211> 97
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<213> Homo sapiens
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1694

<400> 1632

<220>

Xaa Ser Gly Ser Pro Gly Pro Ala Gly Pro Arg Gly Pro Val Gly Pro 10 Xaa Gly Pro Pro Gly Lys Asp Gly Thr Xaa Gly His Pro Gly Ala Ile Gly Pro Pro Gly Pro Arg Gly Asn Xaa Gly Glu Xaa Gly Ser Xaa Gly 40 Ser Pro Gly Pro Xaa Arg Ala Thr Arg Ala Leu Leu Xaa Pro Pro Gly Ala Pro Gly Pro Cys Cys Gly Gly Val Xaa Ala Ala Ala Ile Ala Gly Ile Gly Arg Leu Lys Lys Leu Gly Arg Phe Xaa Pro Arg Val Xaa Trp 90 85 Gly <210> 1633 <211> 43 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (31) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (35) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (38) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (39) <223> Xaa equals any of the naturally occurring L-amino acids

1695

<221> SITE <222> (40) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1633 10 Lys Lys Lys Lys Lys Lys Lys Lys Gly Arg Pro Phe Xaa Arg Ile Gln Xaa Tyr Val Xaa Xaa Xaa Ala Thr Ser 35 <210> 1634 <211> 88 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (82) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (88) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1634 Ala Arg Ala Ala Leu Ser Ala Thr Lys Thr Cys Arg Pro Ala Phe Arg Gly Ala Ser Ala Ala Pro Arg Gly Gly Pro Ala Arg Ser Pro Gly 25 Arg Val Leu Gly Arg His Ala Ala Gly Ser Leu Ala Arg Leu Val Gly 35 40 Arg Ser Arg Gly Phe Trp Leu Leu Gly Gly Glu Val Lys Ser Phe Cys 55 Arg Cys Trp Gly Arg Arg Thr Arg Arg Glu Arg Lys Lys Lys Lys 65 70 75

Lys Xaa Leu Gly Lys Tyr Phe Xaa 85

1696

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<210> 1635
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Asn Glu Ala Asp Gly Asn His Pro Val Glu Val His Leu Arg Ser Asp
             20
                                 25
Pro Asp Asp Ala Arg Ala Met Thr Gly Pro Ala Gly Val Ala Pro Arg
Gly Asp Gln Pro Trp Ser Ser His Arg Arg Lys Pro Leu Arg Ser Gly
                         55
Lys Arg Arg Lys Xaa Lys Trp Gln Lys Gln Lys Glu Pro Gln Ser
65
                     70
Ser Ile Gly Asp His Ser Met His Phe Leu Pro Ala Ala Thr Gln Thr
                                     90
                 85
Leu Pro Glu Leu Leu Xaa Asn Leu Met
            100
<210> 1636
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<212> PRT
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Gln Arg Pro Arg Xaa Xaa Gly Thr Gly Ser Gly Pro Pro Gly Pro Gly
                                     10
Lys Ala Ser His Gly Gly Ala Pro Val Ser Arg Ser Gly Thr Gly
             20
Ser Glu Asp Gly Arg Glu Ser Arg Ala Thr Val Val Val Xaa Cys
                             40
<210> 1637
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Gly Asp Pro Pro Glu Gly Pro Ala Thr Ser Pro Leu Thr Asn Ser Xaa
                                      10
His Pro Xaa Ser Xaa Gly Thr Ala Ala Ala Thr Gln Arg Arg Xaa Ser
Glu Gln Gly Gly Arg Xaa Thr Cys Gly Pro Ala Gly Ala Gly Ser Pro
         35
                              40
Xaa Xaa Pro Pro Arg Ala Xaa
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<210> 1638
<211> 55
<212> PRT
<213> Homo sapiens
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<222> (41)

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Ile Arg Xaa His Ala Thr Xaa Tyr Arg Gly Xaa Phe Cys Xaa Arg Arg
                                    10
Thr Xaa Xaa Leu His Ser Ala Asn Val Thr Thr Xaa Xaa Leu Leu
             20
                                 25
Leu Xaa Xaa Phe Tyr Xaa Xaa Arg Xaa Xaa Ala Xaa Val Asn Ile Ser
                             40
Xaa Val Pro His Cys Pro Ile
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<212> PRT
<213> Homo sapiens
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Ile Cys Pro Gln Asn Pro Leu Asn Pro Leu Val Asn Leu Thr Xaa Ser
                 5
                                    10
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1701

Pro Lys Arg Asn Ser Ser Leu Asp Thr Arg Lys Lys Pro Cys Arg Glu Ser Lys Lys Phe Asn Thr His Ser Arg Pro Lys Ser Ser His Gln Leu 35 40 Arg Lys Arg Ser Ser Xaa Thr Pro Thr Thr 50 55 <210> 1640 <211> 37 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (30) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (32) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (34) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (36) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1640 Met Cys Val Asp Cys Met Asn Asp Leu Glu Lys Lys Lys Lys Lys 5 10 1 25 Gly Xaa Pro Xaa Pro 35

<210> 1641 <211> 41

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<213> Homo sapiens
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Tyr Val Trp Leu Gly His Phe Val Ala Lys Val Arg Thr Cys Leu Trp
 1
                  5
                                     10
Lys Thr Ser Leu Trp Leu Gly Glu Ser Val Trp Pro Ala Ala Ser Asp
             20
                                  25
Leu Cys Arg Val Leu Thr Cys Gln Gly
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<211> 99
<212> PRT
<213> Homo sapiens
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1703

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Xaa Pro Ala Ala Ser Tyr Leu Met Thr Leu Met Glu Pro Leu Ser Leu
                                     10
Ile Xaa Xaa Xaa Leu Ser Pro Pro Leu Xaa Xaa Ser Lys Glu Asn His
                                 25
Phe Asp Ala Arg Ser Cys Leu Xaa Ser Xaa Pro Lys Cys Ser Cys Ser
         35
                             40
Xaa Pro Xaa Pro Gly Ile Ser Leu Pro Arg Asp Lys Ser Ala Ser Glu
Ile Leu His Asp Ser Leu Cys Phe Gln Asn Pro Gly Leu Phe Cys Ile
                    70
                                         75
Ser Ser Phe Leu Gly Pro Ala Ser Cys Val Pro Leu Lys Gly Xaa Trp
                 85
                                     90
Ala Lys Thr
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<210> 1643 <211> 42 <212> PRT

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<213> Homo sapiens
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<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1643
Lys Xaa Pro Xaa Asn Leu Gly Lys Ala Arg Leu Gln Val Pro Val Arg
                                     10
                  5
Asn Ser Arg Val Asp Leu Arg Val Phe Ile Tyr Ile Asp Ile Tyr Ile
             20
                                  25
Asp Ile Tyr Arg Tyr Ile Tyr Arg Tyr Ile
         35
<210> 1644
<211> 46
<212> PRT
<213> Homo sapiens
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<221> SITE
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1705

<222> (42) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (43) <223> Xaa equals any of the naturally occurring L-amino acids Arg Val Gly Val Arg Leu Ala Gln Val Pro Xaa His Leu Thr Ser Arg 5 10 Ser His His Pro His Pro Val Phe His Xaa Arg Leu Lys Ala Thr Met Arg Met Xaa His Thr Glu Ala Xaa Met Xaa Xaa Asn His Leu 40 <210> 1645 <211> 69 <212> PRT <213> Homo sapiens <400> 1645 His Val Arg Leu Lys Pro Ile Phe Ser Pro Phe Phe Leu Leu Phe Ser 1 5 10 Leu Ala Ala His Ile Val Pro Leu Phe Tyr Glu Pro Gln Phe Ser Gly 20 Leu Ser Leu Lys Lys Ser Ser Leu Asn Ile Ala Phe Arg Lys Leu 40 Leu Phe Leu Asp Lys Lys Ser Tyr Thr Leu Lys Lys Lys Thr Phe 55 Ser Arg Lys Ile Tyr 65 <210> 1646 <211> 78 <212> PRT <213> Homo sapiens <220> <221> SITE

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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1646
Ile Ile Cys Phe Val Leu Ser Phe Ile Tyr His Phe Phe Leu Tyr Lys
                                     10
Ser Ile Ile Ser Arg Phe Leu Tyr Tyr Met Ile Asp Ile Asn Trp Val
             20
                                 25
Ile Ser Ser Arg Gln Phe Val Phe Ser Xaa Yaa Pro Pro Ser Thr Val
Ser Gln Arg Pro Asp Xaa Val Gly Lys Val Phe Phe Leu Arg Ile Val
                         55
Lys Gly Ser Xaa Gln Leu Gly Leu Ile Lys Ala Xaa Xaa Pro
 65
                     70
<210> 1647
<211> 58
<212> PRT
<213> Homo sapiens
<400> 1647
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1707

Ile Cys Pro Gln Asn Pro Leu Asn Pro Leu Val Asn Leu Thr Val Ser 1.0 Pro Lys Arg Asn Ser Ser Leu Asp Thr Arg Lys Lys Pro Cys Arg Glu 25 Ser Lys Lys Phe Asn Thr His Ser Arg Pro Lys Ser Ser His Gln Leu Arg Lys Arg Ser Ser Ser Thr Pro Thr Thr 50 55 <210> 1648 <211> 59 <212> PRT <213> Homo sapiens <400> 1648 Cys Leu Phe Leu Leu Pro Val Met Leu Leu Gln Ile His Ile Ser Arg 10 Ser Thr Val Asn Val Ser Thr Ser Arg Gly Thr Pro Pro Ser Thr Leu 25 Ser Val Lys Gly Gln Asn Glu Thr Val Arg Val Lys Gly Thr Gly Arg 35 40 Lys Phe Ala Cys Leu Gln Val Thr Arg Ile Arg 50 55 <210> 1649 <211> 110 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (29) <223> Xaa equals any of the naturally occurring L-amino acids <220>

<221> SITE

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<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (94)
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Val Pro Pro Pro Val Pro Trp Gly Gly Pro Xaa Arg Glu Gly Glu Val
Ser His Thr Lys Ala Asp Ala Pro Leu Val Gly Gly Xaa Trp Pro Gly
Lys Ile Glu Gly Cys Ala Gly Leu Pro Leu Arg Ala Ala Gln Thr Ala
                             40
Leu Met Cys Gly Gly Xaa Ala Arg Trp Val Arg Ala Gln Glu Val Ala
     50
Pro Xaa Thr Val Ala Asp Xaa Leu Pro Arg Val Pro Gly Ser Ser Leu
Tyr Pro Trp Tyr Ala Xaa Asn Xaa Trp Phe Pro His Pro Xaa Ala Ala
Lys Ser Leu Phe Pro Trp Ile Ser Gln Ala Lys Leu Gly Leu
            100
                                105
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1709

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<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1650
Ser Pro Glu Gly Leu Ser Leu Leu Ala Pro Xaa Pro Gly Arg Ala Pro
1 5
Ala Gly Pro Thr Pro Leu Arg Gly Gln Cys Gln Xaa Gly Ser Leu Thr
            20
Gly Ala Val His Leu Ser Asn Gly Asn Ala Gly Val Leu Arg Arg Ala
                            40
Gln Gly Gly Gln Lys Pro Pro Val Glu Gln Lys Gly Lys Ser Ser Leu
            55
Asp Leu His Phe Gln Tyr Glu Tyr Arg Pro
                    70
<210> 1651
<211> 83
<212> PRT
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<210> 1650

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Thr Ala Arg Thr Gly Ala Cys Ser Val Pro Trp Glu His Xaa Ala Gln
                                 25
Leu Ser Gly Val Gln Ala Val Gly Ser Phe Pro Asn Xaa Ser Ile Ser
         35
                             40
Xaa Pro Xaa Xaa Leu Lys Pro Val Gly Gln Ile Ser Lys Xaa Leu Xaa
     50
                         55
Xaa Arg Xaa Pro Phe Thr Asn Pro Arg Phe Cys Gly Gln Cys Pro Lys
Gly Val Gly
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1711

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<400> 1652
Phe Phe Phe Leu Asp Val Lys Gly Ile Xaa Phe Gln Arg Leu Leu
                5
                                     10
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200

1712

Glu Ser Leu Val Tyr Thr Asp Glu Gly Val Arg Cys Cys Phe Pro Ser 25 Glu Ser Ser Ala Ser Thr Glu Ile Xaa Leu Xaa Leu Ile Phe Asp Ile 40 Leu His Cys Leu Leu Xaa Xaa Xaa Arg Ser Phe Leu Pro Phe Thr Ser 55 Pro Ser Asn Tyr Val Gln Met Cys Arg Leu Leu Xaa Ser Gly Leu Ser Pro Lys Ala Leu Thr Leu Gly Leu Xaa Phe 85 <210> 1653 <211> 55 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (40) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (42) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (44) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (48) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (49) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1653 Lys Leu Trp Phe Val Phe Val Phe Cys Leu Phe His Leu Phe Pro Ser 10

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Gln Pro Gln Thr Phe Cys Ser Leu Arg Glu Leu Thr Phe Pro Phe Phe
             20
                                 25
Phe Leu Phe Phe Phe Gly Xaa Leu Xaa Val Xaa Asn Lys Ile Xaa
         35
                             40
Xaa Ala Ile Lys Lys Lys
     50
<210> 1654
<211> 61
<212> PRT
<213> Homo sapiens
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1714

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Val Xaa Ala Thr Asn Leu Pro Ser Leu Val Ile Ala Xaa Cys Ser Xaa
                                    10 .
Ile Glu Ser Leu Val Pro Leu Leu Ile Trp Pro Gln Lys Pro Pro Asn
                                 25
Ser Pro Trp Leu Ile Leu Thr Val Xaa Pro Lys Lys Gly Thr Xaa Ser
         35
                             40
Leu Gly Pro Leu Xaa Lys Lys Thr Leu Xaa Lys Xaa Asn
     50
                         55
<210> 1655
<211> 20
<212> PRT
<213> Homo sapiens
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<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 1655
Ala Ala Val Leu Gln Thr Ala Arg Arg Ala Arg Ser Ala Cys Arg Leu
                                    10
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Xaa Xaa Xaa Xaa

1715

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<211> 24
<212> PRT
<213> Homo sapiens
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<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (19)
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<400> 1656
Ala Asp Ile Gln Thr Glu Arg Ala Tyr Gln Lys Xaa Xaa Thr Ile Phe
                                     10
Xaa Asn Xaa Lys Arg Val Leu Leu
             20
<210> 1657
<211> 34
<212> PRT
<213> Homo sapiens
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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (31)
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<220>
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Ala Ala Cys Leu Pro Ala Thr Glu Xaa Ser Gln His His Glu Gly
         5
Leu Asp Leu Ser Pro Leu Pro Gly Arg Glu Gly Leu Gly Xaa Pro
                                25
Ser Xaa
<210> 1658
<211> 51
<212> PRT
<213> Homo sapiens
<400> 1658
Cys Lys Gln Tyr Leu Thr Asn Pro Gln Val Leu Asn Tyr Gln Thr Cys
Ile Lys Asn Phe Gly Trp Gly Asp Leu Gly Ala Glu Pro Asn Leu Arg
                                25
Ala Val His Ala Lys Thr Ser Pro Val Lys Ala Asn Tyr Tyr Thr Gln
Leu Ile Gln
    50
<210> 1659
<211> 166
<212> PRT
<213> Homo sapiens
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<221> SITE
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<222> (53)

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1719

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<210> 1660 <211> 68 <212> PRT

<213> Homo sapiens

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Ser Pro Gly Leu Gln Glu Phe Gly Xaa Arg Gly Xaa Arg Asn Arg Leu
                 5
Asn Tyr Ala Xaa Xaa His His Xaa Xaa Pro His Arg Xaa Ser Ile Pro
Thr His Ala Leu His Ser Xaa Arg Gly Asp Asp Ala Xaa Leu Thr Ile
Lys Ile Xaa Xaa Pro Pro Met Val Leu Glu Pro Thr Ser Thr Pro Asp
     50
                 55
His Xaa Val Asp
65
<210> 1661
<211> 61
<212> PRT
<213> Homo sapiens
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<400> 1661
Leu Asn Ala Asp Thr Leu Met Asn Asp Gln Gln Leu Ser Ala Leu
                5
Lys Lys Thr Leu Ile Phe Glu Phe Thr Cys Trp Val Pro Gly Ser Asn
            20
                                 25
Gly Gly Lys Arg Pro Leu Phe Ile Lys Arg Gly Pro Pro Phe Xaa Xaa
```

1722

35 40 45

Pro Lys Asp Phe Leu Xaa Phe Gln Ile Gly Lys Gly Thr 50 55 60

<210> 1662

<211> 54

<212> PRT

<213> Homo sapiens

<220>

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<222> (3)

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<221> SITE

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<220>

<221> SITE

<222> (47)

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<400> 1662

Glu Val Xaa Gly Ile Xaa Asn Leu Asp Ile Xaa Phe Gly Thr Ser Asn 20 25 30

Pro His Ser Pro Thr His Ala Gly Gly Cys Ala Cys Arg Thr Xaa Leu 35 40 45

Thr Asp Trp Trp Ile Leu

1723

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<212> PRT
<213> Homo sapiens
<400> 1663
Ala Arg Glu Lys Leu Cys Val Arg Gly Arg Gly Leu Phe Arg Cys Arg
Val Ser Ser Ser Cys Thr Leu Phe Lys Ser Leu His Trp Arg Asn Ser
                                 25
Ala Ile Thr Ser Ser Leu Val Ala Glu Gly Arg Gly Asn Ile His Leu
         35
                              40
                                                  45
Phe Met Pro Val Cys Cys Met Gln Ala Phe Trp Leu Pro Thr Leu Gln
                         55
                                              60
Gln Asn Asn Cys Thr Asn Ser Leu Val Pro Ile Pro Pro Thr Glu Ser
                     70
Pro Gly Ala Thr Val Phe Phe Ala Leu His Cys Lys Glu Arg Asp
                 85
                                     90
<210> 1664
<211> 100
<212> PRT
<213> Homo sapiens
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<210> 1663 <211> 95

1724

<400> 1664 Val Asn Gln Glu Thr Thr Pro Val Asp Cys Gly Ala Leu Glu Gly Leu 5 10 Val Gly Val Asn Leu Pro Thr Pro Tyr Asn Cys Gly Arg Ile Gln Lys 25 Ser Leu Ser Phe Tyr Ile His Ser Leu Asp Val Ile Gly Pro Leu Pro 40 45 Pro Ile Ser Leu Arg Cys His Ala Ser Met Gly Ser Gly Val Val Arg 50 55 Lys Asn Lys Arg Arg Xaa Asp Ser Leu Val Met Asp Lys Ile Leu Thr Thr Val Phe Pro Xaa Gly Ile Pro Tyr Xaa Xaa Phe Asn Phe Phe 90 Ser Leu Lys Asn 100 <210> 1665 <211> 33 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (18) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (21) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (24) <223> Xaa equals any of the naturally occurring L-amino acids <220>

1725

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<400> 1665
Ser Ala Pro Gly Gly Ser Cys Tyr Ser Gly Xaa Pro Arg Val Pro Lys
Cys Xaa Ile Gln Xaa Asp Pro Xaa Ser Xaa Pro Pro Cys Leu Gln Leu
                                 25
Val
<210> 1666
<211> 47
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (37)
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<220>
<221> SITE
<222> (39)
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<400> 1666
Gly Arg Val Gly Gly Arg Val Gly Gly Arg Val Gly Arg Glu Pro Gln
Val Tyr Thr Leu Pro Pro Ser Arg Glu Xaa Met Thr Lys Lys Gln Ser
             20
                                 25
Ala Glu Leu Pro Xaa Ser Xaa Gly Phe Tyr Pro Thr Lys Ser Pro
         35
                             40
                                                 45
<210> 1667
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<211> 34

<212> PRT

1726

<213> Homo sapiens

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<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1667
Leu Glu Ile Thr Leu Gln Gly Glu Pro Lys Leu Arg Pro Pro Lys Pro
Glu Arg Ala Thr Leu Glu Gln Leu Lys Glu His Thr Pro Leu Phe Leu
                                 25
             20
                                                      30
Pro Xaa
<210> 1668
<211> 41
<212> PRT
<213> Homo sapiens
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<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1668
Ile Cys Pro Gln Asn Pro Leu Asn Pro Leu Val Asn Leu Thr Val Xaa
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1727

10

15

1

Pro Lys Arg Asn Lys Leu Phe Gly His Xaa Glu Lys Thr Leu Tyr Arg 20 25 Glu Glu Xaa Xaa Phe Xaa Asn Pro Tyr 35 <210> 1669 <211> 96 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (20) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (77) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (84) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (88) <223> Xaa equals any of the naturally occurring L-amino acids Gly Arg Ala Leu Pro Gly Arg Val Arg Ala Ala Thr Gly Glu Gly Arg 10 Thr Phe Val Xaa Asn Gly Thr Val Leu Leu Ala Pro Pro Arg Gly Gly Pro Leu Val Ser Pro Leu Pro Ala Arg Arg Arg Cys Val Trp Glu Gly 35 40 45 Val Gly Cys Gly Pro Arg Pro Asp Leu Ala Val Pro Pro Ala Ala Phe 50 55 Cys Val Ala Gly Ala Gly Arg Arg Gly Pro Leu Thr Xaa Gln Thr Ala 70 75

1728

Leu Ala Val Xaa Ser Ser Gly Xaa Arg Leu Ala Gly Gly Thr Pro Thr 85 90 95

<210> 1670 <211> 140 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (50) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (112) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (128) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (135) <223> Xaa equals any of the naturally occurring L-amino acids Gly Ser Thr His Ala Ser Gly Ser Thr Glu Lys Glu Gly Leu Leu His Glu Ala Thr Leu Ser Val His Gln Gly Leu Gly Leu Arg Gly Pro Trp 25 Ser Ser Cys Ser Ser Pro Ala Pro Pro Trp Met His Cys Cys Arg Ala 35 40 Glu Xaa Pro Leu Pro Gly Pro Ala Leu Gly Phe Leu Glu Thr Ser Phe 50 Ser Phe Ala Ile Phe Phe Lys Trp Glu Lys Gly Gly Gln Leu Ser Leu 70 75 Gly Lys Arg Gly Pro Ala Thr Cys Pro Ala Trp Ala Pro Glu Pro Ser 85 90 95

1729

Ser Leu Thr Gly Gln Ser Leu Val Gly Lys Ala Ala Ser Trp Pro Xaa 100 105 110

Ser Leu Leu Met Phe Leu Val Ser Arg Val Gln Ser Gln Leu Phe Xaa 115 120 125

Phe Leu Val Val Pro Val Xaa Glu Ala Phe Gln Asn 130 135 140

<210> 1671

<211> 34

<212> PRT

<213> Homo sapiens

<220>

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<220>

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<220>

<221> SITE

<222> (20)

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<220>

<221> SITE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1671

His Xaa Xaa Met Glu Ser Asp Lys Met Val Thr Gly Ser Trp Gly Pro 1 5 10 15

Arg Leu Ser Xaa His Glu Gly Cys Ser Ala Xaa Cys Ile Ser Val Tyr
20 25 30

Val Val

<210> 1672

<211> 113

1730

<213> Homo sapiens

<220>

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<212> PRT

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<222> (7)

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1672

Arg Xaa Leu Leu Thr Ile Xaa Glu Ser Trp Tyr Xaa Cys Arg Tyr Arg 1 5 10 15

Ser Gly Ile Pro Gly Gly Ile Pro Leu Ser Pro Arg Asp Pro Thr Leu $20 \hspace{1cm} 25 \hspace{1cm} 30$

Ala Ser Trp Pro Thr Arg Ser Arg Glu Ser Leu Arg Glu Arg Arg Arg 35 40 45

Ser Arg Ala Ala Ser Gly Leu Gly Ile Arg Pro Leu Gly Pro Pro Leu 50 55 60

Val Ser Arg Val Gly Arg Asn Arg Arg Leu Ala His Leu Ala Trp Val 65 70 75 80

Cys Pro His Val Val Ile Val Gln Ile Asn Ala His Ser Glu Leu Ala 85 90 95

Val Tyr Phe Leu Lys Phe Asn Ile Val Phe Val Ile Leu Lys Tyr Leu 100 105 110

Leu

<210> 1673

<211> 86

<212> PRT

<213> Homo sapiens

<220>

1731

<221> SITE

<222> (85)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1673

Pro Ala Phe Asn Phe Asp Pro Leu Phe Phe Leu Phe Val Arg Cys Thr $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Arg Leu Pro Ser Cys Phe Ser Leu Leu Ser Cys His Gln Pro Phe Leu 20 25 30

Leu Gly Gly His Val Leu Gly Lys Arg Pro His Asp Leu Ser Gly Ser 35 40 45

Thr Gln Cys Leu Arg His Pro Ala Ser Phe Ala Cys Ile Pro Gln Thr 50 55 60

Ile Ser Leu Ile Leu Phe Thr Ala Ala Asn Leu Ser Leu Val Asp Glu 65 70 75 80

Thr Val Phe Ile Xaa Leu

85

<210> 1674

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1674

Ser Asp Tyr Glu Leu Leu Phe Lys Arg Lys Met Leu Phe Ile His Ala 1 5 10 15

Glu Val Ile Gln Phe Pro Pro Ser Tyr Arg Ser Ile Leu Ile His Pro $20 \hspace{1cm} 25 \hspace{1cm} 30$

Thr Leu Glu Met Gln His Leu Cys Gly Arg Leu Phe His Lys Pro Pro 35 40 45

Arg Leu Leu Arg Leu Gly Arg Tyr 50 55

<210> 1675

<211> 65

<212> PRT

<213> Homo sapiens

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<400> 1675
Leu Val Cys Ile Leu Pro Lys Val Arg Xaa Pro Thr Leu Gly Ile Thr
                  5
                                     10
Leu Leu Ile Val Ile Leu Val Xaa Ile Leu Pro Gly Val Met Tyr Ser
             20
Leu Lys Ala Leu Asn Val Cys Ile Ala Thr Xaa His Gln Ile Leu Asn
                             40
Gly Leu Ser Phe Gly Trp Asn Tyr Lys Leu Lys Lys Cys Phe Ser Gly
                         55
                                             60
Lys
65
<210> 1676
<211> 52
<212> PRT
<213> Homo sapiens
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<400> 1676
Pro Thr Glu Gln Val Thr Leu Gly Ile Thr Ala Gln Ser Tyr Ser Arg
                                     10
Val His Ile Asn Asn Arg Val Tyr Asp Leu Asp Val Gly Ser Gly His
                                 25
Pro Asp Gly Ala Ala Ile Lys Gly Ser Phe Xaa Gln Arg Leu Lys
         35
                             40
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Ser Tyr Val Ile
    50
<210> 1677
<211> 40
<212> PRT
<213> Homo sapiens
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1
                5
                                  10
                                                     15
Lys Lys Lys Lys Lys Gly Gly Arg Xaa Lys Gly Ser Lys Leu Thr
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1734

20 25 30

Tyr Xaa Cys Met Xaa Arg Xaa Ser 35 40

<210> 1678

<211> 49

<212> PRT

<213> Homo sapiens

<400> 1678

Thr Ala Ala Met Ser Ile Phe Thr Pro Thr Asn Gln Ile Arg Leu Thr 1 5 10 15

Asn Val Ala Val Val Arg Met Lys Arg Ala Arg Lys Arg Phe Glu Ile
20 25 30

Ala Cys Tyr Arg Asn Lys Ser Ser Ala Gly Gly Gly Leu Trp Lys Lys 35 40 45

Thr

<210> 1679

<211> 51

<212> PRT

<213> Homo sapiens

<400> 1679

Ala Ala Ala Gln Gln Val Val Asp Gln Ala Thr Glu Ala Gly Gln Lys 1 5 10 15

Ala Met Asp Gln Leu Ala Lys Thr Thr Gln Glu Thr Ile Asp Lys Thr 20 25 30

Ala Asn Gln Ala Ser Asp Thr Phe Ser Gly Ile Gly Lys Lys Phe Gly 35 40 45

Leu Leu Lys 50

<210> 1680

<211> 41

<212> PRT

<213> Homo sapiens

1735

<400> 1680 Ala Phe Asn Arg Ser Gln Arg Gly Ser Cys Ser Ala Thr Tyr Glu Thr 10 Pro Thr Gln Lys Gln Val Val Tyr Glu Trp Phe Ser Ala Arg Phe Pro 25 Thr Asn Val Arg Cys Val Thr Gly Glu 35 <210> 1681 <211> 34 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1681 Gly Xaa Gly Val Arg Val Asn Val Arg Thr Ser Ala Gly Cys Ser Pro His Pro Asn Pro Leu Pro Lys Gly Arg Arg Gly Pro Val Thr Gln Phe 20 25 30 Ala Leu <210> 1682 <211> 85 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (36) <223> Xaa equals any of the naturally occurring L-amino acids <220>

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<221> SITE <222> (64)

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<221> SITE

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Ala Ser Asn Ser Asn Tyr Ala Leu Ile Gly Ala Leu Arg Ala Val Ala
                                     10
Gln Thr Ile Ser Tyr Glu Val Thr Leu Ala Ile Ile Pro Thr Ile Asn
                                 25
Ile Thr Asn Xaa Leu Ala Pro Leu Thr Ser Pro Pro Leu Ser Gln His
                            40
Lys Asn Thr Pro Glu Tyr Pro Ala Ile Ile Thr Leu Trp Pro Tyr Xaa
                         55
Ile Ile Phe His Thr Arg Xaa Asn Asn Glu Pro Pro Ser Xaa Leu Xaa
                    70
                                         75
Lys Gly Asn Phe Xaa
<210> 1683
<211> 53
<212> PRT
<213> Homo sapiens
<400> 1683
Val Gly Leu Glu Ile Asn Met Leu Ala Phe Ile Pro Val Leu Thr Lys
                5
                                    10
Lys Ile Asn Pro Arg Ser Thr Glu Ala Ile Lys Tyr Phe Leu Thr
             20
                                 25
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1737

Gln Ala Thr Ala Ser Ile Ile Leu Leu Ile Ala Ile Leu Phe Asn Asn 35 40 Ile Leu Ser Gly Gln 50 <210> 1684 <211> 169 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (146) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (152) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (154) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (156) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (161) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1684 Pro Val Ser Ala Lys Lys Glu Lys Lys Val Ser Cys Met Phe Ile Pro 5 10 Asp Gly Arg Val Ser Val Ser Ala Arg Ile Asp Arg Lys Gly Phe Cys Glu Gly Asp Glu Ile Ser Ile His Ala Asp Phe Glu Asn Thr Cys Ser 35 Arg Ile Val Val Pro Lys Ala Ala Ile Val Ala Arg His Thr Tyr Leu 50 55 60

1738

Ala Asn Gly Gln Thr Lys Val Leu Thr Gln Lys Leu Ser Ser Val Arg 7.0 75 Gly Asn His Ile Ile Ser Gly Thr Cys Ala Ser Trp Arg Gly Lys Ser 85 90 Leu Arg Val Gln Lys Ile Arg Pro Ser Ile Leu Gly Cys Asn Ile Leu 105 Arg Val Glu Tyr Ser Leu Leu Ile Tyr Val Ser Val Pro Gly Ser Lys 120 Lys Val Ile Leu Asp Leu Pro Leu Val Ile Gly Ser Arg Ser Gly Leu 130 135 Ser Xaa Arg Thr Ser Ser Trp Xaa Ala Xaa Thr Xaa Ser Glu Asp Glu 145 150 155 Xaa Gly Arg Ser Glu His Pro Asp Thr

<210> 1685

<211> 733

<212> DNA

<213> Homo sapiens

165

<400> 1685

gggatcegga gcccaaatct tetgacaaaa etecacatg cccacegtge ccageacctg 60 aattegaggg tgcacegtca gtetteetet teececaaa acceaaggac acceteatga 120 teteceggac teetgaggte acatgegtgg tggtggacgt aagecaegaa gaceetgagg 180 teaagtteaa etggtacegt gacggegtgg aggtgcataa tgccaagaca aagecgeggg 240 aggagaatga caacagaacg tacegtgtgg teagegteet cacegteetg caceaggact 300 ggctgaatgg caaggagtac aagtgcaagg tetecaacaa ageceteeca acceceateg 360 agaaaaccat etecaaagec aaagggcage eeegagaace acaggtgtac accetegece 420 cateceggga tgagetgace aagaaccagg teageetgac etggetegte aaaggettet 480 atecaagega eategeegg teegacgga gcaatgggca geeggagaac acceacegtgg 600 acaaggacag gtggcagaa gggaacgtet teteatgete egtgatgat gaggetetge 660 acaaccacta cacgcagaag ageeteteec tgteteeggg taaatgagtg egacggeege 720 gactetagag gat

<210> 1686

<211> 5

<212> PRT

<213> Homo sapiens

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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1686
Trp Ser Xaa Trp Ser
<210> 1687
<211> 86
<212> DNA
<213> Homo sapiens
<400> 1687
gcgcctcgag atttccccga aatctagatt tccccgaaat gatttccccg aaatgatttc 60
cccgaaatat ctgccatctc aattag
<210> 1688
<211> 27
<212> DNA
<213> Homo sapiens
<400> 1688
gcggcaagct ttttgcaaag cctaggc
                                                                   27
<210> 1689
<211> 271
<212> DNA
<213> Homo sapiens
<400> 1689
ctcgagattt ccccgaaatc tagatttccc cgaaatgatt tccccgaaat gatttccccg 60
aaatatctgc catctcaatt agtcagcaac catagtcccg cccctaactc cgcccatccc 120
gcccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa tttttttat 180
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					cagaggccga	
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cttttgcaaa	aagctt					256

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A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : C12P 19/34							
US CL : 435/91.1							
	According to International Patent Classification (IPC) or to both national classification and IPC						
B. FIEL	B. FIELDS SEARCHED						
Minimum documentation searched (classification system followed by classification symbols) U.S.: 435/91.1							
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched							
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) MEDLINE, SCISEARCH, GenEmbl Database							
C. DOC	UMENTS CONSIDERED TO BE RELEVANT						
Category *	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.				
Y	Database GenEmbl on STN. KELKER, W. 'Seque GenEmbl Database, Accession Z18923.1, Version Z 1992 (04.12.1992), see nucleotide position 456-100	18923.1 GI:31074, 04 December,	1-12, 14-16, and 21 for SEQ ID NO:1				
Y	BANERJI, J. A gene pair from the human major hi proline-rich proteins with multiple repeated motifs Proc. Natl. Acad. Sci. USA, 1990, Vol 87, pages 2	1-12, 14-16, and 21 for SEQ ID NO:2					
Y	Database GenEmbl on STN. SKUCE, C. 'Homo sa 661120 map q11.23-12', GenEmbl Database, Acees GI:6983365, 11 FEBRUARY, 2000 (04.02.2000),	1-12, 14-16, and 21 for SEQ ID NO:3					
Database GenEmbl on STN. RAKER, V.A. 'Human SnRNP core protein Sm D2 mRNA complete cds'., GenEmbl Database, Accession U15008, Version U15008.1 GI:600747, December, 1994 (10.12.1994), see nucelotide position 23-479			1-12, 14-16, and 21 for SEQ ID NO:4				
Y			1-12, 14-16 and 21 for SEQ ID NO:6				
Further	documents are listed in the continuation of Box C.	See patent family annex.					
* S	pecial categories of cited documents:	"T" later document published after the inte date and not in conflict with the applic					
	defining the general state of the art which is not considered to be lar relevance	principle or theory underlying the inve	ention				
"E" earlier application or patent published on or after the international filing date		"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive ste when the document is taken alone					
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination					
"O" document referring to an oral disclosure, use, exhibition or other means		being obvious to a person skilled in the					
"P" document published prior to the international filing date but later than the priority date claimed		"&" document member of the same patent family					
Date of the actual completion of the international search		Date of mailing of the international search report 2 6 JUL 2000					
03 May 2000 (03.05.2000) Name and mailing address of the ISA/US							
Commissioner of Patents and Trademarks		(Jasser Burger					
Box PCT Washington, D.C. 20231		Michael Woodward					
Facsimile No. (703)305-3230		Telephone No. (703) 308-0196					

International application No.

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Contine	nation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	Database GenEmbl on STN. SHARMA et al 'Human class III alcohol dehydrogenase (ADH5) chi subunit mRNA, complete cds.', GenEmbl Database, Accession M30471, Version M30471.1 GI:178133, 5 October, 1995 (05.10.1997), see nucleotide position 2-2277.	1-12, 14-16, and 21 for SEQ ID NO:8
	Database GenEmbl on STN. ABEDINIA, M. 'Human transketolase (TKT) mRNA, complete cds.', GenEmbl, Accession U55017 M86521, Version U55017.1 GI:1297296, 6 May, 1996 (06.05.1996), see nucleotide position 687-2038.	1-12, 14-16, and 21 for SEQ ID NO:10
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:	·	
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:		

Form PCT/ISA/210 (continuation of second sheet) (July 1998)

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Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)				
This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:				
1. Claim Nos.: because they relate to subject matter not required to be searched by this Authority, namely:				
2. Claim Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:				
3. Claim Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).				
Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)				
This International Searching Authority found multiple inventions in this international application, as follows: Please See Continuation Sheet				
1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.				
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.				
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:				
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-12, 14-16, and 21 for the first 10 sequences in Table 1 Remark on Protest The additional search fees were accompanied by the applicant's protest.				
No protest accompanied the payment of additional search fees.				

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BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1.

Group 1, claims 1-12, 14-16, and 21 in so far as they are drawn to the first ten polynucleotides of Table 1 (pages 12-118), protein, vector, gene, method of making host cell, recombinant host cell, method of producing the protein of SEQ ID NO:61.

Groups 2-209, claims 1-12, 14-16, in so far as they are drawn to the next 208 polynucleotide groups (any four sequences constitute a single group) and encoded proteins listed in Table 1.

Groups 210-418, claim 13, in so far as they are drawn to isolated antibodies that bind to any one group of the next 208 polypeptide sequence groups listed in Table 1.

Groups 419-627, claims 15-16, in so far as they are drawn to a method of making any one group of the next 208 polypeptide sequence groups listed in Table 1.

Groups 628-836, claim 17, in so far as they are drawn to a method of treatment by administration any one group of the next 208 polypeptide sequence groups listed in Table 1.

Groups 837-1045, claim 18, in so far as they are drawn to a method of diagnosing a pathological condition by determining a presence or absence of a mutation in any one group of the next 208 polypeptide sequence groups listed in Table 1.

Groups 1046-1255, claim 19, in so far as they are drawn to a method of diagnosing a pathological condition by determining the presence or amount of any one group of the next 208 polypeptide sequence groups listed in Table 1.

Groups 1256-1465, claims 20 and 23, in so far as they are drawn to a method of identifying any one group of the next 208 polypeptide sequence groups listed in Table 1, and the product produce by the same method.

Group 1466-1675, claim 22, in so far as they are drawn to a method of identifying an activity in a biological assay by expression of any one group of the next 208 polypeptide sequence groups listed in Table 1.

The inventions not elected, do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT rule 13.2, the non-elected groups lack the same or corresponding technical features for the following reasons: Group 1 corresponds to the first invention wherein the first product is the polynucleotide, and the first method of use is the method of using the polynucleotide to make the protein, and the protein. Note, there is no method of making the polynucleotide. Each of groups 2-1675 does not share the same or corresponding special technical feature because, each group is drawn to different polynucleotide or encoded protein. Additionally, each of groups 210-1675 does not share the same or corresponding technical feature because, each group is drawn to different compounds or methods of using any of the fifty polynucleotides and encoded proteins listed in Table 1. The Authority therefore considers that the several inventions do not share a special technical feature within the meaning of PCT Rule 13.2 and thus do not relate to a single general inventive concept within the meaning of PCT Rule 13.1.